

MANUFACTURERS' RECORD

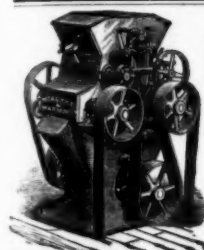
A Weekly Southern Industrial and Hardware Newspaper.

Vol. 9. No. 10.
WEEKLY.

BALTIMORE, APRIL 17, 1886.

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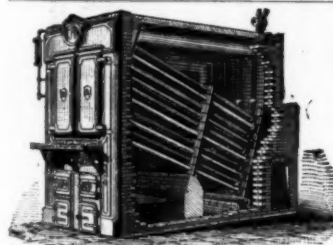
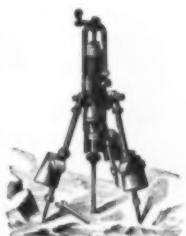
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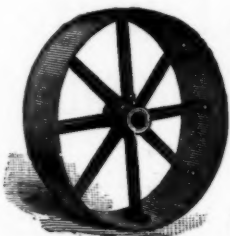
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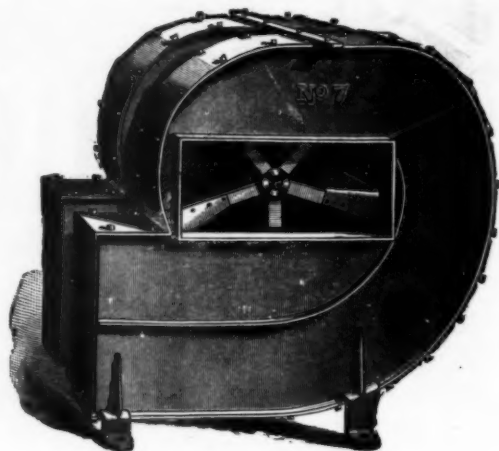


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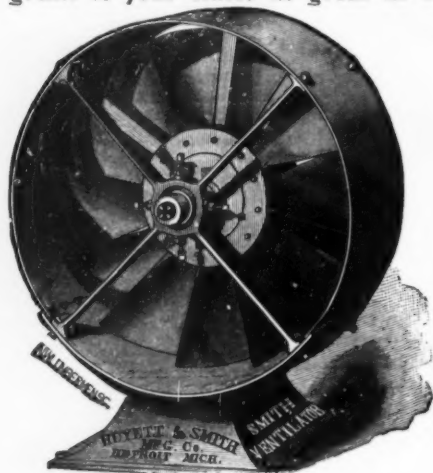


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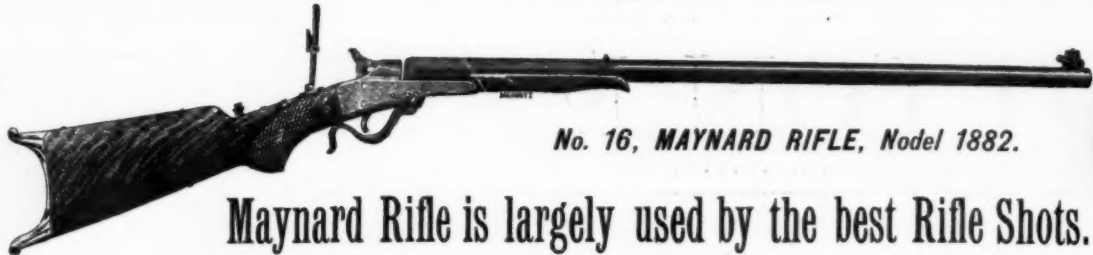
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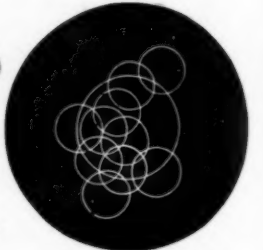
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Our Stock takes Rifle
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Maynard Rifle is largely used by the best Rifle Shots.



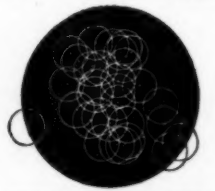
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On May 9, 1885, Mr. W. H. TAFT, of Brattleboro', Vt., made in a regular match, with a Maynard Rifle, at 200 yards distance, off-hand, 117 out of a possible 120, on the Massachusetts Paper Target, a score which has never been excelled.

Inside of a ring $3\frac{1}{4}$ inch diameter, Mr. C. H. BROWN, of Fitchburg, Mass., in a regular match at Walnut Hill Range, July 5th, 1884, at a distance of 200 yards, with a Maynard Rifle, placed 7 consecutive shots.

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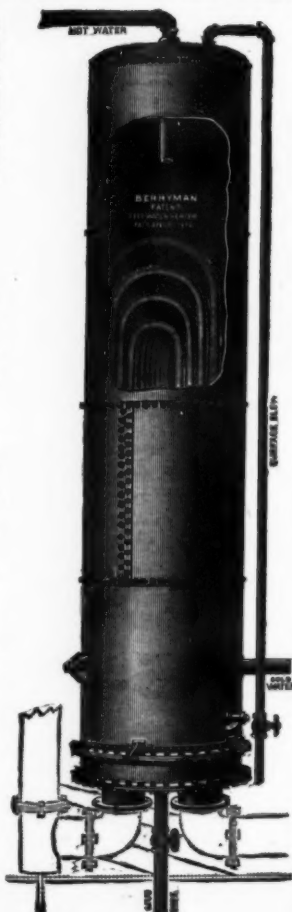
Boiler repairs, and the vexation by shutting down when in a hurry, are saved. The trouble and expense of throwing out a poor heater and putting in a good one are saved by the use of **THE BERRYMAN FEED WATER HEATER AND PURIFIER.**

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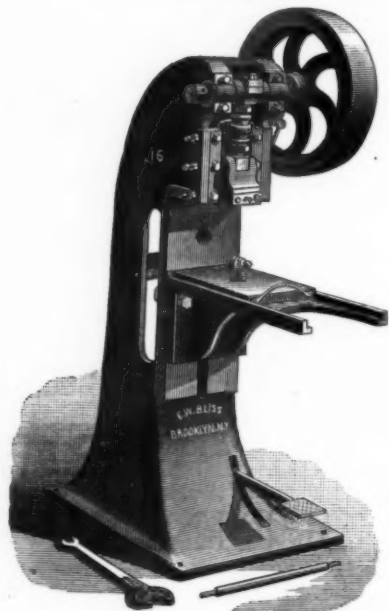


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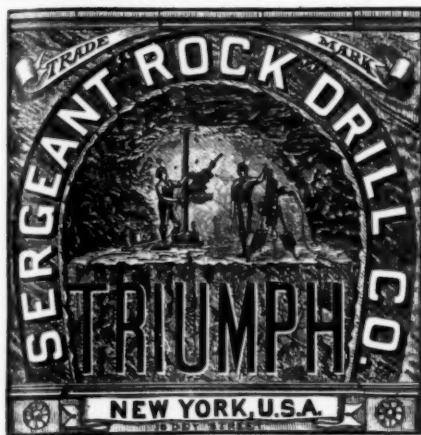
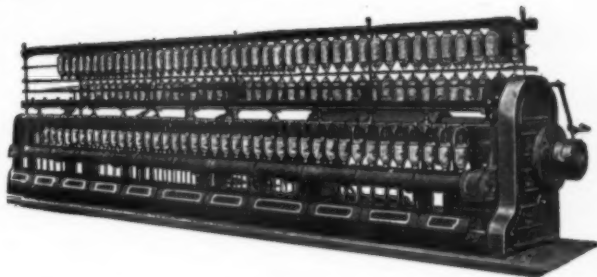
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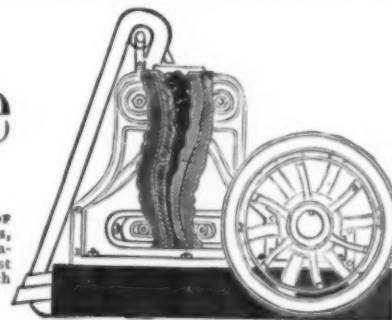
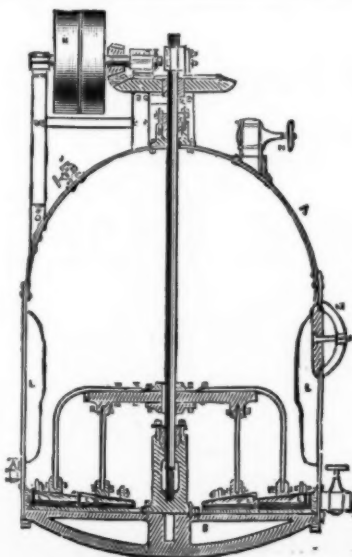
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This Machine will CRUSH AND PULVERIZE GOLD AND SILVER ORES to 20, 40, and 60 mesh fine, and from 20, 40 and 60 tons per day. The principles of this machine, making it superior to all others, are the peculiar concave and convex shape of the jaws, with concave and convex projections, which breaks, crumbles, stamps and pulverizes the ore with less power, wear and tear, than any other machine. MANUFACTURED BY

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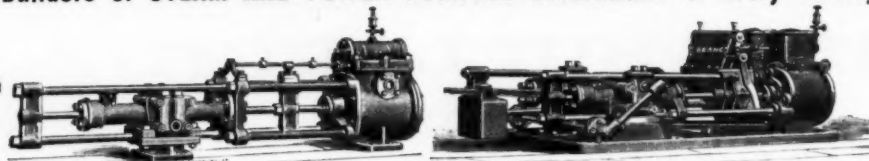
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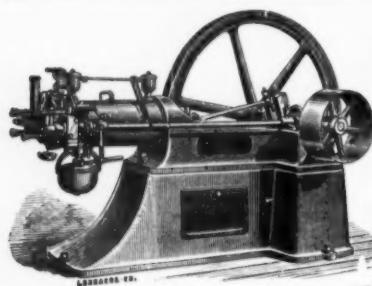
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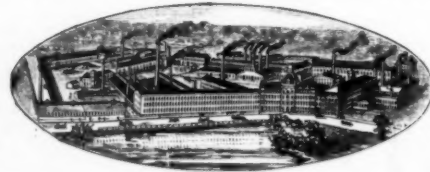
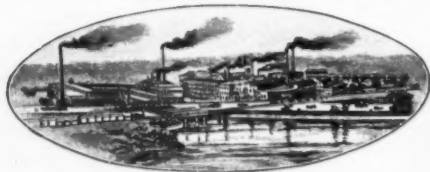
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1885.	in	per		in	per	
blast.	week.			blast.	week.	
January 1.....	86	31,564		82	35,818	
February 1.....	81	31,180		87	46,653	
March 1.....	86	32,889		91	46,774	
April 1.....	88	31,704		90	45,655	
May 1.....	80	30,729		93	43,397	
June 1.....	79	19,834		94	44,498	
July 1.....	81	30,444		93	43,945	
August 1.....	77	30,530		86	44,845	
September 1.....	78	30,190		89	46,663	
October 1.....	75	30,318		88	43,234	
November 1.....	86	34,270		94	44,101	
December 1.....	94	26,816		99	49,790	
1886.						
January 1.....	104	39,811		114	54,199	
February 1.....	107	36,100		113	55,354	
March 1.....	104	36,115		109	54,420	
April 1.....	117	33,280		121	54,021	

OUR BIRMINGHAM LETTER.

Some Railroad Projects—The Transfer of West Florida to Alabama.

[Special correspondence MANUFACTURERS' RECORD.]

BIRMINGHAM, ALA., April 12, 1886.

The elements are propitious once more, and although the unpleasant predictions of Professor Parker to the effect that we are to catch general thunder and rain during the "last ten days of the month are not reassuring, still the surcease of storm and darkness, and relief from the inconvenience of being without mail for a whole week, have led to a revival of business, which flattened out considerably during the days of the flood. Except in the way of temporary depression, mental and mercantile, Birmingham enjoyed its customary good fortune. While the works at Tennessee river points, Gadsden and so on were compelled to stop, and Montgomery, Selma and other neighbours were up to their eyes in water, everything here went on just as usual. Now the trouble is over, railway and postal service on the old footing, and general activity resumed.

It was a pretty good test of the solidity of the "boom" that the general stoppage of business occasioned by the floods did not in the least affect prices here, and that, when the skies began to smile again, the movement started exactly where it had left off. Values to-day shew some, though not notable, advance over the real estate market of ten days ago. This I mean as of general application. In certain localities prices have jumped considerably within a week. A prominent reason for this is the fact that Mr. de Bardeleben is home, after a trip East, in the course of which he consummated arrangements for a large amount of fresh capital. He has commenced operations at Avondale, a suburb adjoining the corporation, where ground is being cleared for a new furnace adjacent to his Mary Pratt furnace. Preparations for two other furnaces are well under way, and for the furnaces and steel plant at Jonesboro as well.

Reports which have appeared in the MANUFACTURERS' RECORD in regard to the probability of new railway facilities at Tuscaloosa have excited much attention both in that town and throughout the State. The probability that something is to be done in the matter grows stronger. Although Tuscaloosa has been side-tracked to some extent in connection with the rapid development of this district, it cannot be doubted that the natural position of the place is remarkably strong. The improvement of the Warrior river would make Tuscaloosa a great coal shipping point, and possibly make Mobile the coal port of the gulf. It would be of nearly if not quite equal importance if a line of railway were run from Tuscaloosa down the Cahaba valley to Selma, whence there would be all the year water navigation to Mobile, and a short railway cut to Pensacola. The chiefs among the railway people have been thinking over the matter very seriously, and it seems likely that there will be a speedy outcome to the affair.

A private meeting of the officers of several leading lines was held in Birmingham Saturday in a quiet way, and as far as the public are allowed to know the results of the conference, were conclusive to the entrance of the Kansas City, Fort Scott & Gulf, and the probable early advent of the Georgia Central road. It is evident that the importance of Birmingham both as a producing and strategic point is apparent enough to the big-wigs of the railway world to make them all anxious to get in here as soon as possible. The prospect of the rapid extension of the railway movement on Bir-

mingham, in connection with the discovery of Bessemer ores, and current preparations for the erection of many industrial enterprises, operate to excite a great deal of outside interest in what we have to sell, at this time. There never was a time in the history of the place when mineral property stood as well as it does now, and holders of large blocks of it, especially of coal lands, are just beginning to realize what valuable property they have captured. The chances seem to be that a great deal will change hands within the next 90 days. Projected railway operations will bring every acre almost of the Warrior, Cahaba and Coosa fields within easy reach of transportation. It is reported that an Eastern syndicate has made a proposition to buy about 75,000 acres of superior coal territory directly tributary to three railway lines, and there is a likelihood that the negotiation will go through. One of the best developed coal properties in the district has been also pointed at by Pennsylvania capitalists, who are willing to pay a round price for it. The owners, however, are at present indisposed to sell, although I fancy that some arrangement could ultimately be made.

Right here let me make the suggestion to the readers of the MANUFACTURERS' RECORD that there is the brightest chance for a successful cotton manufacturing business in Birmingham that has occurred anywhere in the South within my experience. We have a fine cotton mill already stocked and ready for operation. The plant and facilities are all that could be desired, and what is of much more importance there are parties who stand ready to contract for the entire output on terms profitable to the producer and with ample security. Such a chance should not go begging, and will not. I should be happy to give full information to any of your subscribers or readers on the subject.

Referring to the various movements on the tapis looking to a gulf outlet for the minerals of this region, there appears to be a growing sentiment here favorable to the acquisition of West Florida by Alabama. During the reconstruction days, when the carpet-baggers were in power, there was a potent movement in that direction, and one could almost wish that the unsavory crowd had consummated the scheme instead of some others. With such a coast line, and with as many harbors as Florida possesses, and with the practical segregation of the extreme western from the other portions of the State, Pensacola is not of particular value to Florida. On the other hand, it would be of infinite advantages to Alabama. Pensacola is probably the best harbor on the gulf, and it is in the direct line of and the natural objective point of the North and South development of this region and the whole Mississippi valley. It is the proper outlet for Birmingham and the possible gulf metropolis under the new order of things which should obtain with the accomplishment of Capt. Ead's ship railway across the Isthmus of Tehuantepec. With the building of only a short link in the Louisville & Nashville Railway system, the coals, iron and steel of this locality could be carried to Pensacola about as cheaply as by any means of water transportation dreamed of in the State. Moreover, if Birmingham energy and the outside capital that Birmingham can control were thrown into Pensacola, there is little room for doubt that great results would follow. It happens, as I am informed, that the feeling in Florida is friendly to the transfer of the Western port and county to Alabama, and it is to be hoped that the legislature of the latter will take kindly to the project. As for the Floridians most directly to be affected by the change, their interests and associations are much more largely identified with us than with their present political government. Their internal commerce is with Alabama, and all their

roads—railroads—lead to Birmingham, as regards their paying business with Northern customers and producers. Allied to the industrial development and progress of Northern Alabama, Pensacola might easily become the metropolis of the gulf.

The iron market is without particular change. Furnaces are all running to capacity, and under improved conditions and facilities have increased practical capacity. There is more No. 1 foundry being turned out than ever before, the bulk of the run in one or two establishments keeping closely to that high mark. The demand is very active from the East. Western orders are rather more quiet, the recent strikes having exercised a depressing effect upon manufacturing industries in that section. All the iron lines here are active. Quotations for pig iron are:

No. 1 Foundry.....	\$15 50
No. 2 Foundry.....	14 50
No. 3 Foundry.....	13 75
Grey Forge.....	13 00

I hope to have farther developments in relation to Bessemer ores to report next week.

G. B. WEST.

Gold Mining in North Carolina From a Business Point of View.

[By Arthur Winslow, B. S., Engineer and Geologist, Raleigh, N. C.]

The increased interest with which the people of the North regard the South as a field for investment is well indicated by the extent to which Northern capital has, of late years, sought investment in the mineral lands of Virginia, Georgia, North Carolina and other Southern States. And the South, in no way blind to the advantages which it will derive from this movement, has been more than ready to meet it half way and to advertise and display before the world all its variety of natural riches.

Few who visited the Boston Exposition, in October, 1883, will forget what a brilliant and comprehensive display was made by the North Carolina Department. And yet, without resting from the expense and labor of gathering, sending and bringing back all of this bulky collection, with truly laudable zeal, North Carolina set to work to bring together a still larger collection and to organize a State Exposition, and a large portion of this accumulation of samples and specimens was in its turn packed together, shipped to New Orleans and displayed last winter at the World's Exposition.

Most prominent among all these collections of natural products was the display of minerals and ores, and of these again the gold ores were the most numerous. Large piles of sulphides and of gold-bearing quartz were heaped upon the tables, representative of over fifty mines; great blocks of vein rock, bristling with ore, were conspicuously distributed, and everything together gave one the impression that here, in the strict sense of the word, was the true El Dorado.

Yet, on looking from the Exposition out into the State, there is not seen that mining activity which all this display of mineral wealth would seem to call for. There are, it is true, numbers of mines. In twelve counties alone, in the central part of the State, are over 70 mines, and though many of these consist of perhaps only a single shaft, 50 feet or so deep, on the other hand the developments at many are extensive, and fully deserve to be dignified with the name of mine.

The query, therefore, immediately suggests itself: Why is this the case? Why is it, with all this abundance of gold ore, much of which is stated on good authority to assay \$10, \$20, \$50 and even \$100 to the ton, that the ground is not fairly riddled with shafts and levels, and the air full with the din of the stamp mill? Is the supply of ore too scant? Is its value exaggerated, and are the assays misleading? Are the people unskilled and ill-informed in the

processes of working the ores? Are they too poor to afford the necessary preliminary outlay? Or do exaggerated valuations of mining properties, or does merely a general distrust of mining as a business, withhold capitalists from venturing into this field of work? In the answers to all these questions lies the solution of the problem and, in the opinion of the writer, the causes which they suggest are each and all operative.

To illustrate this opinion and to make the case clear, it is necessary that the character of the gold ores of the State be well understood.

The gold ores occur in veins and in beds in what Prof. Kerr considers Laurentian (Pyro-crystalline or Primary of Emmons) and Huronian (Taconic of Emmons) rocks, and their distribution is almost co-extensive with the areas of these formations. The region of their greatest exploitation is, however, in the central part of the State, and consists of a belt which enters on the north from Virginia within Person, Grantville and Franklin counties, and extends thence southwards into South Carolina, through Gaston, Mecklenburg and Union counties, and the counties intermediate between these and Person.

From a metallurgical point of view, these ores may be classed as sulphide ores, or gold associated with sulphides of iron, copper and other minerals; free milling ores, or gold in solid quartz or slates, or in decomposed surface rock, resulting from the decay of the sulphide ores ("brown ores"); and placer gravels, or gold disseminated through grit and gravel deposits. But these distinctions, though of great importance to the miner and metallurgist, represent really only different phases in the life of the same ore. The sulphide ores and the ores with gold disseminated in the free state through the solid rock, are in the condition in which they were originally deposited in the vein or bed; the decomposed, free-milling, brown ore, represents this same sulphide ore after experiencing the weathering effects of air and water during past ages; while the placer gravels are these decomposed ores, broken up, washed and slid down from their habitat and concentrated by the milling operations of natural agencies.

In the sulphide ores the gold, alloyed frequently with silver, is intimately associated with the sulphides of iron and copper; it also occurs with galena, zincblende, hematite and other minerals, but the sulphide of iron is the one with which it is most intimately mixed, and, in a complex ore, the amount of gold is generally proportional to the amount of iron pyrites. These ores are never found at the surface, associated with the broken and decomposed rock, but are only reached at depths of sometimes more than a hundred feet, where they occur in the solid rock, beyond the reach of atmospheric agencies. The mixture of the gold with the sulphides, though probably of a mechanical nature, is so intimate, and the associations often so complex, that careful metallurgical treatment is required for the extraction of the greater part of the gold. Large capital, scientific knowledge and trained workmen are needed for the successful reduction of such ores, and, as the supply of all the former is very limited in the North State, mines are frequently abandoned when these ores are reached, after they have been worked down through the free-milling brown ores. Thus large bodies which would elsewhere be considered paying, if not rich, are left untouched, awaiting the advent of enterprise and capital.

Tracing the sulphide deposits upwards, they pass, by successive gradations in fracture and decay, into the free-milling "brown" ores. The brown color of this ore is due to the iron oxide resulting from the decomposition of the iron pyrites of the sulphide ore, and so complete is the decay and disintegration of this and other minerals associated with it, that the gold is left in an almost free state, and can be extracted by

simple crushing and amalgamation. Mines in such ore prove generally very profitable, but it is the history of them all that, after passing down through 50 or 100 feet, the solid sulphides are reached.

The remaining class of free-milling gold ores consists of those found in veins of compact quartz, calcite and other minerals, and those in which the gold is disseminated through talcose slate and other stratified rocks. Here the gold occurs in minute specks, in fine threads and wires, and occasionally in large, irregularly shaped nuggets. These ores differ from the free-milling brown ores in the important respect that they do not pass into sulphides at depths. The gold, disseminated through the slates or other stratified rocks, is regarded as a true sediment, deposited with the other materials of the rock at the time of its formation, though it seems in places to have been transferred, by some segregating molecular movement, from the interior of a mass to its surfaces of fracture. The line of demarcation between the gold bearing stratum and the unproductive rock is rarely distinct. Such slates, being of Huronian age, the gold is supposed to have been derived from the auriferous veins of the pre-existing Laurentian rocks.

This description is sufficient to give an intelligent idea of the general characteristics of the rock from which the gold is to be taken.

Turning now to the questions put in the first portion of this article, let us consider them in order. Is the supply of ore too scant? A short acquaintance with the State will leave little doubt in one's mind with regard to this point. Inquiry in almost any county of the central and western portions will reveal the presence of one or several mines which are in operation or which were once the scenes of active work; of some vein of promising appearance, or of some gravel bed from which the natives, with their crude methods, are able to wash out a subsistence. These deposits are, in most instances, of workable thickness, and in many cases the gold-bearing strata reaches the great width of fifty or sixty feet, and the mining of the ore reverts to simple quarrying. In vertical extent the supply is none the less assured. Many mines are working at depths of several hundred feet. The Gold Hill Mine is down over 750 feet, and claims the distinction of being the deepest gold mine this side of the Rocky mountains. Those mines which have ceased operations as greater depths were reached, have done so, generally, not because of a diminution of ore supply, but for reason of changes in the character of the ore already alluded to.

The value of ores is often doubtless exaggerated. But though, as in all business transactions, such misrepresentation is frequently intentional and arising from fraudulent motives, in a great number of cases this is not so, and the wrong impression conveyed concerning the value of an ore is the result of ignorance and the failure on the part of both owner and purchaser to appreciate the conditions and the necessities of the case. The mere result of the assay of an ore is utterly of no value unless the conditions are known under which the sample was taken. The final object of all assays and examinations is to determine just how much gold can be freed from every ton of rock taken out; and at what cost. To determine this the sampling of the vein must be done with the utmost care and skill. The assay of a lump or two picked up at random may yield a result of \$50 to the ton, and the ore might be classed accordingly on this slight foundation, while an average sample carefully collected, with full consideration of the conditions of mining, might show for the same vein only \$10 to the ton. Then, in determining the value of an ore, it is of first importance to know how readily it can be concentrated. Mere hand picking of the rock taken out of the mine may double the richness of the product, while, on the other hand, the gold-

bearing portion of the ore may be so intimately mixed with worthless material in the vein that an elaborate process has to be gone through with to concentrate it. Further, an assay result gives no information as to the relative amounts of free gold and of gold combined with sulphides which exist in the ore, and this has an important bearing on the cost of extracting the gold.

These facts will readily explain the reasons for those excessive valuations which are honest but ignorant. And the gold ores of the State, though abundant, cannot as a rule be considered rich. Crude ores which are claimed to average \$40, \$50 and more to the ton should be regarded with suspicion. The bulk of the supply is of low grade, but capable of yielding good returns to careful and skillful management; and no magic is required for their successful treatment. Some of the ores, it is true, are exceedingly refractory. As a rule, however, they consist of just such "sulphurets" as are worked the world over for gold.

A knowledge of the proper methods of working these ores can come only after practice and study, and such knowledge the people of the State do not possess. While the free milling surface ores lasted, an intelligent owner of a gold property could soon post himself sufficiently to be able to extract most of the gold with an inexpensive plant, but as soon as the solid, undecomposed ores were reached his knowledge failed him and his methods became inefficient. And the owners of property are generally poor men, with neither the means to employ experts and to erect an expensive plant, nor the influence to induce others to do this for them; but, as a rule, they are not inclined to overestimate the value of their properties and offer them for sale at reasonable prices, and they are generally willing to proportion their receipts to the returns of the mine. But the great curse to many a mine has been the mine-sharks—speculators and middlemen—people who secure control of a property on moderate terms, by bond or otherwise, without the outlay of a dollar; who then float it on to the market through their special channels by means only too well known to mining men, and who finally effect a sale at a price far in excess of what the property is worth, and of which the first cost is only a small fraction. In such transactions intentional misrepresentation and fraud (by "salting" or in other ways) is only too common.* But, on the other hand, the people who put their money into such ventures are largely to blame. As long as men regard mining as a species of speculation, and not as a legitimate business; as long as they are willing to launch out into "wild-cat" schemes with possible millions as anticipated returns, so long will the rogues thrive, the public be swindled and the mining industry be brought into discredit. The net value of a gold property is simply the value of the gold in the ore which can be calculated to be present, minus the cost of getting it out. The man who pays a large sum for a property from the mere indications of an outcropping vein deserves to lose his money.

With a certain class such speculating in mines and in everything will always be common; but from year to year there is steadily growing a set of men who take up mining in a cool, business-like manner—men who are satisfied with net returns which enable them to gradually build up a sinking fund and at the same time yield them a reasonable interest on the money invested; and North Carolina is feeling the effects of the growth of this class. During the past few years an increased number of mines have been opened up and are now in successful operation and are declaring dividends. Prominent

*These remarks are not intended in any way to reflect discredit upon agents for the sale of mineral lands in general. Agency for such sales is as legitimate a business as that for the sale of any other lands. But the conditions affecting the value of a mining property are so much more intricate and difficult to determine than with other property, that the chances for successful fraud are much greater, and consequently the percentage of rascals practicing it higher. Hence, special caution is necessary.

among these is the New Hoover Hill Mine, in Randolph county, which has a 20-stamp mill, employs about a hundred men, and is producing at the rate of five or six thousand dollars per month; the Russell mine, in Montgomery county, which is stated to be yielding eight to nine thousand dollars per month, and the Gold Hill mine, in Rowan county, which will be the scene of large operations during the coming year, under a new organization. These three mines are owned by English companies. Further, the well-managed St. Catherine mine, near Charlotte, keeps up a steady shipment of concentrates, and the adjoining Rudisill mine and the Steel mine, in Montgomery county, employing seventy-five men, are both rising into prominence. The old King's Mountain mine, in Gaston county, has resumed work during the past year, and many others might be mentioned. One of the most promising enterprises is the chlorination works of the Yaddin Mining & Milling Company, established at Salisbury, and which are now in successful operation. They purchase ores from the mines and extract the gold at their works, thus saving the expense of shipping such ores North for reduction, and permitting the profitable mining of ores which would not bear such long shipment.

The mining industry of the State is a growing one—is one of the future—and it is growing on a sounder basis than heretofore. The State suffers from a neglect by its government of the mining interests. There is no mining bureau or other department where a would-be investor can get accurate and detailed information concerning the character and location of its various ores. Such a man is all too liable to "fall among thieves," unless very much on his guard. Though the idea is generally prevalent of the existence of abundance of all kinds of ores, their areas of distribution are not defined or mapped out, their accessibility not demonstrated, and their characteristics generally only known from rumor or from the results of a few assays. No effort is made to obtain the results of all the practical experimentation which is constantly in progress at the different mills in the State, and which would throw so much light upon the best methods of working the ores; and thus each mine operator has, to a great extent, to work out the same old problems over again for himself at just so much unnecessary expense and labor.

The patent-process men have done much to injure Southern mining. Every now and then some one appears who controls or manufactures a special form of concentrator or amalgamator, or what not, which, it is claimed, will produce wonderful results. A mill is erected and started. Everything does not turn out as well as expected. The yields are low. Consequently the ore is condemned and the good name of the property injured, while the fault really lay in the improper construction of the plant and the ignorance of the inventor or mill man. Property-owners would do well to think twice before they stake their property upon the success of any patent process.

The industry also suffers from the inaccessibility of many of the mines. The railroad lines through the State are few, and they have thrown out very few branch or side lines, and any one familiar with the South knows what a curse to every industry is the condition of the turn-pikes, and other roads, during many months of the year. Either soft with a thick covering of mud or frozen and deeply rutted, these roads are almost impassable in winter, and a thousand-pound load is often as much as three horses can pull. The impediments to the operation of many mines, which this inaccessibility raises, will readily suggest themselves. It makes transportation of everything to and fro difficult, it prevents shipment of concentrates, and therefore necessitates the erection of the reduction plant near to the mines; but as such a plant, if not fed by one

very large mine, requires several mines to keep it running, it, on the other hand, has need to be located not far from some line of railroad.

With the opening out of the country, mining in North Carolina is bound to grow. The ores are there, and the knowledge of how to work them successfully is gradually increasing. Reasonable valuations on the part of the property-owners attract capital; the exercise of proper caution and discretion by investors will produce an increased confidence in mining as a business; careful, trained and honest management of the work will secure the best returns, and with increased attention to these facts, the industry cannot but develop into one of the most thriving of the State—Bulletin N. C. State Agricultural Department.

A Thriving North Carolina Town.

[Special correspondence MANUFACTURERS' RECORD.]

FAYETTEVILLE, N. C., April 12, 1886.

Fayetteville, N. C., is situated on the west bank of the Cape Fear river, about 50 miles south of the capital of the State. It is at the head of navigation, distant by water from the ocean via Wilmington, N. C., about 140 miles. The river is navigable all the year round, and very comfortable and good-sized steamboats ply between Fayetteville and Wilmington. Many fine shad are caught in the river, and large quantities of cotton, rosin, timber, tar and turpentine are boated and rafted down to market. At Fayetteville the river is crossed by a fine bridge, which cost about \$45,000. This bridge belongs to the county of Cumberland, and is free to all. One mile above the town there is in progress of construction a fine stone and iron bridge for the railroad, which is being rapidly built by the Atlantic Coast Line system. This line passes through Fayetteville, N. C., and will shorten the distance between the North and South about 70 miles compared with the present route via Wilmington. It is reasonably expected that the whole of the through travel to Florida and all points in the South will soon be turned through Fayetteville, N. C. The Cape Fear & Yaddin Valley Railroad passes through also. This road is completed from Greensboro, N. C., to Bennettsville, S. C., and will soon also be completed to Mount Airy, 65 miles northwest of Greensboro, N. C. This system of railway passes through some of the best portions of North Carolina, and is almost at right angles with the North Carolina Road, which runs from the sea shore via Goldsboro, Raleigh, Greensboro and Charlotte, N. C. The shops for this road are located in Fayetteville. Here, too, are found many industries, such as carriage factory, wagon shops, tool and edge works, ice factory, iron foundry, sash, blind and door works, cotton-seed oil mill, wove carding mills, &c., &c.; and also in the near vicinity 5 cotton and plaid factories, while there are within the limits of the town itself several sites for cotton mills of excellent and never failing water power, which were destroyed during the war and are yet awaiting the necessary capital to rebuild them. The trade of the town is on the increase, and many goods are jobbed and retailed here, as could be shown by the immense freights that come to and are sent from this place. Building is very general here. Many large store houses and neat and attractive dwellings have been erected recently or are now in the course of construction. Property has increased in value. Rents have risen, and there is an unmistakable air and evidence of improvement all over the town. There are two National Banks with capital of \$225,000. There are maintained here a graded school for whites and a normal school for blacks, besides several other private schools. There are, also, 10 churches in the town.

Capital and labor are harmonious. There seems to be plenty work for all at fair wages. The surrounding county is improving in its varied interests, and evidences of improved farming are noticeable in every direction. The climate of the place is most excellent, and there is no part of the State more healthy. The society of the place is of the best, and the place, as a whole, must and does prove to be attractive to strangers. It may be predicted with absolute certainty that the many and great advantages of Fayetteville, N. C., will soon double the population—which is now about 6,000 souls.

F. R. ROSE,

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

The Simplex Compress Manufacturing Co., capital stock \$500,000, has been organized at Montgomery, Ala., to manufacture cotton compresses, with E. B. Joseph, president and treasurer and J. A. Gaboury, general manager. The company are now negotiating with parties for the manufacture of their presses.

The de Bardeleben Coal & Iron Co., previously reported as incorporated at Birmingham, Ala., have commenced clearing the right of way for their road, which they will build from Jonesboro to Birmingham, Ala.

A saw mill has been erected by J. W. Cross, W. D. Hart and Columbus Hart, near Andalusia, Ala.

The North Alabama Land Co. will develop new coal mines near Cullman, Ala.

J. C. Webb talks of building an ice factory at Demopolis, Ala.

A stock company is being organized at Brewton, Ala., to build a factory for manufacturing hubs, spokes, wagons, &c. Charles Sowell can give particulars.

Mr. Pilant will erect a saw mill at Gurley, Ala.

S. S. Ward will start a machine shop at Eufaula, Ala.

W. G. Davis will add a grist mill and planing mill to his saw mill at Athens, Ala.

ARKANSAS.

D. R. Wing & Co. are building a new foundry at Little Rock, Ark., 60x150 feet.

The Little Rock Cooperage Co., Little Rock, Ark., whose works were reported last week as burned, loss \$20,000, are rebuilding.

R. L. Cobb & Co., Little Rock, Ark., will remodel their machine shop and foundry, erect new buildings and put in some new machinery.

FLORIDA.

The Jacksonville, Tampa & Key West Railroad Co. will extend their road from Sanford to Tavares, Fla., twenty-nine miles.

The Jacksonville Belt Railroad Co. has been organized at Jacksonville, Fla., to build a street railroad about three miles long.

The Beauford & Northwestern Railroad Co., to extend from Beauford, Fla., to the Georgia state line, has been incorporated.

Messrs. Persons have established a brick yard at Cotton Plant, Fla.

Mr. Polly has recently erected a saw mill at Belleview, Fla.

GEORGIA.

George Davis has erected a grist mill at Smarr's Station, Ga.

Work has been commenced on the new yarn factory at Augusta, Ga., for E. H. Coates & Co., previously reported.

The Perkins Manufacturing Co., Harrison, Ga., in addition to erecting the shingle, lath and planing mill, previously reported, contemplate removing one of their sash, door and blind factories from Augusta to Harrison,

A \$100,000 stock company will probably be organized at Atlanta, Ga., to manufacture wagons. E. Van Winkle, Thomas Clark, Mr. Rankin and others will be interested in it.

Work has been commenced on the Savannah, Dublin & Western Railroad in Georgia. The company will erect shops, probably at Dublin.

A saw mill has been erected near Griffin, Ga., by R. W. Hale.

KENTUCKY.

The capacity of the Dueber Watch Case Manufacturing Co.'s works, at Newport, Ky., will be doubled. It is stated that the company will remove either one-half or their entire works to some other city if sufficient inducements are offered.

Bills have been introduced in the Kentucky legislature to incorporate the Enterprise Street Railway Co., of Louisville, capital stock \$100,000; the Damascus Edge Tool & Manufacturing Co., capital stock \$1,000,000, with J. W. Miles, George W. Baylor and M. F. Coomes, of Louisville, as incorporators; the Silver Crown Mining & Manufacturing Co. and the Louisville & Portsmouth Railway Co.

Dunigan & Nicol, Frankfort, Ky., whose saw mill was reported last week as burned, loss \$15,000, are rebuilding.

James R. Mills, Thomas A. Logan, Edward C. Mills, Howard M. Adae and Nathaniel Rockhold have incorporated at Covington, Ky., the Cincinnati Paper Novelty Co., capital stock \$5,000, to manufacture envelopes.

LOUISIANA.

The Monroe Compress & Warehouse Co., Monroe, La., previously reported, are negotiating for a compress and other machinery.

Larkin & Ribbeck have erected at New Iberia, La., a building, 60x150 feet, for manufacturing boilers.

H. G. Morgan, Harry H. Hall, Geo. Denegre, Walter D. Denegre, Sam'l P. Blanc, Omer Villere and Charles Carroll have incorporated at New Orleans, La., the Louisiana Honradez Tobacco Manufacturing Co., capital stock \$10,000, to manufacture cigars and smoking tobacco.

MARYLAND.

Ogle & Thomas have rented a mill building at Mechanicstown, Md., and will put in machinery for a saw and grist mill.

The Barber Asphalt Paving Co., Washington, D. C., have increased their capital stock from \$320,000 to \$500,000.

\$10,000 has been subscribed towards organizing a \$20,000 stock company to erect a roller flour mill at Centerville, Md. J. H. Hall and W. L. Lowe, previously reported, will be interested in it and can give any information.

MISSISSIPPI.

M. L. Dedman will establish a soda water factory and bottling establishment at Vicksburg, Miss.

NORTH CAROLINA.

W. H. Idol, Jamestown, N. C., will erect a saw mill. Part of the machinery has been ordered.

J. H. Feree and J. H. Walker, Randleman, N. C., will erect 60 looms to manufacture plaids in the building formerly used as a sash factory.

S. E. Lucas has purchased a site at Brevard, N. C., and is making arrangements to build a flour mill.

J. C. Cooper has recently erected a large distillery at Brevard, N. C.

Anthony & Brice are removing their ice factory from Charlotte to Tarboro, N. C.

Asheville, N. C., will decide by vote May 18, whether or not to spend \$70,000 for water works and \$30,000 for other improvements.

Roderic Bergerson will build a mill at Durham's Creek, N. C.

Phelps & Vogler, Advance, N. C., have ordered the necessary machinery to erect a distillery.

J. R. Jones, Natt Atkinson, G. M. Roberts, H. S. Harkins, H. C. Jones, J. E. Reed, W. W. Rollins, Norris Allison and M. G. Jones have incorporated at Henderson, the Boilston Mining Company, capital stock \$100,000, to mine for gold and other minerals in North Carolina.

It is stated that a tobacco factory will be started at Gibsonville, N. C., by Henry W. Steel.

Thomas Beard & Co., will add a corn mill to their saw mill near Midway, N. C.

Card & Gallup, New Berne, N. C., have bought 660 acres of timber land in Craven county and will erect a steam saw mill. The capacity will be 20 M feet daily.

SOUTH CAROLINA.

The Oliver Oil Co., Columbia, S. C., have built an oil refinery at their mill, at a cost of about \$3,000. Two more presses and a steam pump will be put in this summer.

The contract for building the new jail at Lexington C. H., S. C., previously reported, has been let to J. D. Ford, of Macon, Ga., at \$9,742.

C. R. Harwin is erecting a saw mill three miles from Dudley, S. C., and building a tram road from Dudley to his mill.

The Equitable Gas Co., capital stock \$200,000, has been chartered at Charleston, S. C.

TENNESSEE.

Baylor & Davis have leased several hundred acres of land near Chattanooga, Tenn., and will bore for gas and oil.

Peebles Bros. will erect a five story hotel at Chattanooga, Tenn., to cost \$50,000.

J. H. Allen, previously reported as having leased the Southern Scale Factory, at Chattanooga, Tenn., contemplates erecting a new factory, it is stated.

C. C. Shelton will add considerable new machinery to his flouring mills at Chattanooga, Tenn., increasing their capacity.

The capital stock of the Home Pump Co., reported last week as incorporated at Nashville, Tenn., is \$15,000.

The Tennessee Coal, Iron & Railroad Co., Nashville, Tenn., have decided to erect at once another iron furnace at South Pittsburgh, Tenn. 250 coke ovens will also be erected.

The Citizens' Water Co. has been incorporated at Memphis, Tenn., by L. R. Bullock, Emil Waltman, E. F. Fuller, J. C. Neely, W. H. Moore, Napoleon Hill and others.

TEXAS.

The Denison City Water Co., previously reported as incorporated at Denison, Texas, have let the contract for their pumping engines to the Holly Manufacturing Co., Lockport, N. Y.

W. H. Marshall, D. H. Moore and John H. Walker have chartered at Paris, Texas, the Paris Electric Light Co., capital stock \$25,000.

Hanly Bros., of St. Louis, Mo., have received the contract to build a new jail at Quitman, Tex., to cost \$8,500.

R. J. Loonie, Meridian, Texas, has received the contract to build at that place, the court house, previously reported. It is to cost \$49,400.

Charles Finigis has opened, and will develop, a stone quarry six miles from Austin, Tex.

L. A. Ellis has erected a sugar mill at Sugar Land, Tex.

Victor Mather, D. L. B. Wicks and J. E. Johnson have chartered at Austin, Tex., the Austin Electric Light Co., capital stock \$25,000.

The Farmers' Alliance of Bosque county, Texas, contemplate building a large flouring mill.

VIRGINIA.

John Murphy will erect a three-story hotel at Richmond, Va.

It is said that the Virginia Organ Factory, Dayton, Va., recently burned, will be rebuilt.

D. T. Hogan has erected a saw mill at Sandy Ford, Va.

The Petersburg Cotton Mills, Petersburg, Va., previously reported as having been sold to Woodward, Baldwin & Co., of Baltimore, will soon be put in operation. About \$5,000 will be spent in making repairs and improvements.

William N. Seay, of Amherst county, Va., has purchased a site at Green Forest, Va., and will erect iron and wood-working machinery.

The Acme Chemical Mining & Manufacturing Co. will erect a saw mill and develop a slate quarry near New Castle, Va.

WEST VIRGINIA.

Meyer & Helmick have received the contract at \$48,350 to build a court house at Clarksburg, W. Va.

The Ravenswood, Spencer & Glenville Railroad Co., previously reported as organized in West Virginia, has a capital stock of \$100,000. The principal office is to be at Spencer.

BURNED.

The mill of E. A. Hammond at Trion Factory, Ga.; the gin of William C. Trott at Six Mile, Ala.; the mill of C. H. Simmons at Talladega, Ala.; loss \$4,000; and the mill of William Traylor, Wedowee, Ala., are reported as destroyed by the late flood.

The gin of H. F. Ford, Big Bend, La.

The works of the Lone Star Salt Co., Colorado, Texas; loss \$7,000.

The foundry of the Nashville Stove and Manufacturing Co., Nashville, Tenn.; loss about \$10,000.

The saw mill of Solon Ferguson, Moark, Ark.

W. L. McKnight's gin house at Lynchburg, S. C.

The saw mill of the Belmore Florida Land Co., Green Cove Springs, Fla.

The flour mill of Mr. Nailor, near Elkton, Va. Loss \$2,500.

Shingle and Planing Mill.

HARRISON, GA., April 5, 1886.

Editor *Manufacturers' Record*:

We expect to build shingle, lath and planing mill, and also expect soon to remove one of our blind, sash and door factories, now located in Augusta, Ga., to this place, together with dry kilns, etc.

PERKINS MANUFACTURING CO.

LOCKWOOD, GREENE & CO.
MILL ENGINEERS

Office, 65 Westminster St., Providence, R. I.,

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

\$50,000 Cooperage Company.

DALLAS, TEXAS, April 5, 1886.

Editor Manufacturers' Record:

The Dallas Cooperage Co., with an authorized capital of \$50,000, of which \$23,000 is paid up, succeeds the Dallas Barrel & Woodenware Factory. Our buildings are already erected, and we expect to work full force of hands within a very short time. Our principal business now is making flour barrels, though we intend making a specialty of well buckets, kegs and barrels in the near future.

GEO. J. DEXTER.

CALERA, ALA., April 9, 1886.

Editor Manufacturers' Record:

Our company has passed a resolution to raise and expend the sum of \$200,000 in developing our property and building or assisting to build manufacturing industries in Calera.

CALERA LAND CO.

J. H. DUNSTON.

100-Barrel Flour Mill.

SAN ANGELO, TEXAS, April 9, 1886.

Editor Manufacturers' Record:

The Pioneer Rolling Mill Co., of this place, has been incorporated with an authorized capital of \$50,000, and a subscribed capital of \$20,000. The contract for the mill plant has been let. It will have a capacity of 100 barrels.

L. B. HARRIS.

GREENFOREST, VA., April 10, 1886.

Editor Manufacturers' Record:

Mr. Wm. N. Seay, of Amherst county, Va., has purchased a site for his works, and Mr. Appold has signified his intention of enlarging his tannery. Nothing has been done so far except the purchasing of the sites. Mr. Seay is a practical machinist of great enterprise and energy. What he proposes to do is not fully revealed, but his shops will be well furnished with various kinds of iron and wood-working machinery. Other enterprises are in prospect, but not yet sufficiently developed to be reported. Our superior location for manufacturing is beginning to attract attention. We have two railroads—the Richmond & Alleghany and the Shenandoah Valley Railroad. We have inexhaustible water power improved and millions of tons of the finest iron ores. Greenforest is destined to be a manufacturing town of no little importance.

WM. H. HUNTER.

Flour Mill.

DENTON, MD., April 9, 1886.

Editor Manufacturers' Record:

I have contracted with the J. T. Noyes Manufacturing Co., Buffalo N. Y., for a 50 to 65 barrel mill. Will run it with my saw mill and at the same site—Denton Bridge.

F. W. REDDEN.

New Coke Ovens.

EAGLE, W. VA., April 10, 1886.

Editor Manufacturers' Record:

I am now building 30 ovens and have 84 in blast.

WM. WYANT.

More New Coke Ovens.

FIRE CREEK, W. VA., April 9, 1886.

Editor Manufacturers' Record:

The report that we will build 34 new coke ovens is correct. We are now at work on the same which will be completed sometime during the coming summer.

FIRE CREEK COAL & COKE CO.

Saw Mill.

NEW BERNE, N. C., April 12, 1886.

Editor Manufacturers' Record:

We are erecting a steam saw mill in Craven county with a capacity of 20,000 feet a day.

CARD & GALLUP.

Flour Mill.

BUFFALO, KY., April 12, 1886.

Editor Manufacturers' Record:

We have contracted with Nordyke & Marmon Co., of Indianapolis, Ind., to furnish and put in operation a full roller mill, with steam power, of 35 barrels capacity. The mill will be three stories, 30x36 feet.

JOHNSON & DAWSON.

Flour Mill.

BREVARD, N. C., April 12, 1886.

Editor Manufacturers' Record:

I am erecting a roller flour mill, and will use a 30 horse-power turbine water wheel. It will be completed by August 1. The site is near town. A water site near by is for sale, and is good opening for a starch factory. The climate and soil are unexcelled, and this is a fine section for potatoes.

S. E. LUCAS.

Saw and Grist Mill.

SANDERS' STORE, N. C., April 12, 1886.

Editor Manufacturers' Record:

We have erected a saw and grist mill at this place which is in successful operation.

J. W. SANDERS & CO.

Saw Mill and Slate Quarry.

NEWCASTLE, VA., April 12, 1886.

Editor Manufacturers' Record:

The Acme Chemical Mining & Manufacturing Co. will build a saw mill and develop a slate quarry near this place, for which the engine and boilers with machinery are now bought.

JOHN F. CRIPPS.

\$200,000 Gas Co.

CHARLESTON, S. C., April 12, 1886.

Editor Manufacturers' Record:

I have issued a charter to the Equitable Gas Co., of Charleston, capital stock \$200,000.

THEO. G. BOAG.

\$30,000 Cracker Co.

FORT WORTH, TEX., April 7, 1886.

Editor Manufacturers' Record:

The Wright-Carter Cracker Co., Fort Worth, Tex., with a capital stock of \$30,000, will be in running order about the first of May next. The building is of stone, 75x90 feet. The oven has capacity of 60 barrels flour per day in crackers.

M. C. WRIGHT.

Electric Light Plant.

SHREVEPORT, LA., April 8, 1886.

Editor Manufacturers' Record:

I have recently purchased an electric light plant and am now putting it up in this city.

C. A. LEFFINGWELL.

Saw Mill.

MORGANTON, TENN., April 8, 1886.

Editor Manufacturers' Record:

I am erecting a circular saw mill and will run it with a turbine wheel.

THOMAS A. CRUSE.

NEW IBERIA, LA., April 7, 1886.

Editor Manufacturers' Record:

Messrs. Larkin & Ribbeck have erected in connection with their copper, tin and sheet iron works, a building 60x150 feet for the manufacture of boilers.

J. P. SUBERHIELLE.

500 New Coke Ovens.

PRATT MINE, ALA., April 8, 1886.

Editor Manufacturers' Record:

We are at work on our new plant of coke ovens, and intend building 500 coke ovens.

PRATT COAL & IRON CO.

Compress Manufacturing Co.

MONTGOMERY, ALA., April 10, 1886.

Editor Manufacturers' Record:

We have just organized and perfected a strong corporate company here, with a capital stock of \$500,000, and we are negotiating now with some big iron forging mills and foundries to manufacture them and will close contract on April 20th.

SIMPLEX COMPRESS MANFG. CO.

15-Ton Ice Factory.

AMERICUS, GA., April 12, 1886.

Editor Manufacturers' Record:

We are erecting a 15-ton ice plant, made by the Consolidated Ice Machinery Co. of Chicago. We expect to be ready for business about the first of May. There is a good opening here for a machine shop and it would receive the encouragement of the people.

BELL & SIMS.

Rebuilding Mill.

FRANKFORT, KY., April 9, 1886.

Editor Manufacturers' Record:

We are now rebuilding our mills, and expect to have our saw and planing mills in full blast within sixty days.

DUNIGAN & NICOL.

RALEIGH, N. C., April 10, 1886.

Editor Manufacturers' Record:

I have moved my tobacco factory from Kinston to Raleigh, N. C., and expect to commence the manufacture of plug tobacco by June 1, 1886.

C. F. HARVEY.

NASHVILLE, TENN., April 6, 1886.

Editor Manufacturers' Record:

The Home Pump Co. was recently organized, capital stock \$15,000. At present stock will be manufactured for the company per contract. We ultimately intend to erect works and produce pumps and other articles in this city, at which time capital will be increased.

C. S. PEARCE.

COLUMBIA, S. C., April 9, 1886.

Editor Manufacturers' Record:

We have built an oil refinery at a cost of about \$3,000, and we have a capacity of 100 barrels per day. Are now building a brick store-house, 100x120 feet, to be used for mixing fertilizers and storing meal. Will put in two more Smith & Vail presses the coming summer; also one more steam pump. Will then have a capacity of 100 tons of seed per day.

OLIVER OIL COMPANY.

Rebuilding Works.

LITTLE ROCK, ARK., April 9, 1886.

Editor Manufacturers' Record:

We are now at work rebuilding our works which were destroyed by fire.

LITTLE ROCK COOPERAGE CO.

Law Department.

Edited by B. HOWARD HAMAN, Attorney at Law, Baltimore, Md.

It is the province of this Department to reply to enquiries that may be made by our patrons respecting the legal aspects of any matter that may arise in their business. Any questions as to doubtful points of law will be answered without charge in this column. All questions submitted must be accompanied by the name and address of the sender, not however, for publication. Letters should be addressed, Editor Law Department, MANUFACTURERS' RECORD.

*Editor Law Department,**Manufacturers' Record:*

I sold sometime ago several hundred cases of canned goods to a New York jobber, who has refused to accept them on the pretended ground that they do not come up to the sample. This is, however, not true, and my losses on account of his refusal to accept the goods are considerable. This party has goods belonging to him in Harford county, and what I wish to know is whether I can lay an attachment against the goods for this kind of a claim?

J. L.

ABERDEEN, MD., April 9, 1886.

Reply.—Your question is an exceedingly interesting one. Under the attachment laws of this State no attachment can be issued

unless for a fixed debt, or unless the contract furnishes a rule by which the debt can be ascertained. The point involved in your question has never been decided in Maryland, and the general opinion is that the attachment would not lie. We think, however, that the reason is on your side, and believe that you have more than a fair chance of winning under such an attachment. You run a risk, however, of a suit for damages on account of taking the goods of your debtor if the attachment should be quashed. This risk is not great with canned goods since they are not perishable.

*Editor Law Department,**Manufacturers' Record:*

I received a copy of your valuable paper the other day through a friend, and shall at once use your legal department, provided you will give me the right to do it by sending me your paper for one year, for which I enclosed \$3.00. Please inform me whether under your law a shipper of goods to Maryland has a right to stop them before they reach their destination in the case of a bona fide failure on the part of the consignee of the goods. There is no fraud in the case at all, and I have reprieved my goods, but am told that there is a doubt in the case since the failure was a fair one.

EAST SAGINAW, MICH., April 7, 1886. M. S. O.

Reply.—There is no doubt in your case whatever. An insolvency of the consignee gives you a right to stop the goods without regard to the fairness of his failure.

*Editor Law Department,**Manufacturers' Record:*

Will you please inform me as to a question in which I am very much interested. I own a house on which there is a ground rent of \$150 a year, and when I took a lease for 99 years it was made redeemable under the new law at 4½ per cent., but I only received \$2,500, the 6 per cent. valuation. Have I not a right, after 15 years, to regard this as a mortgage and to buy the lease by paying \$2,500 instead of redeeming it at 4½ per cent.?

BALTIMORE, April 12, 1886. L. N. T.

Reply.—This exact question is now before the Court of Appeals of Maryland for their decision, and a judgement will be given within the next three months, which will be abundant time for you to know your rights in the premises. We think your position is a correct one.

LEGAL JOTTINGS.

* Telegraph poles and wires erected within the limits of a street or highway with legislative sanction can not be regarded as nuisances or restrained as such, even though they may incommode persons in front of whose houses they are erected.—Washington Law Reporter.

The Lawyer's Prayer.—A St. Paul clergyman relates the following incident. Sometime ago, as the story runs, W. W. Erwin, the criminal lawyer, pressed for a little change, dropped into the office of D. W. Ingersoll, and asked him for the loan of \$5. Mr. Ingersoll declined to make the advance, but suggested that, instead, if Mr. Erwin would go into the basement with him he would pray for him. Mr. Erwin consented, and the two went into the depths, where, on bended knees, Mr. Ingersoll prayed long and well for his brother man. When he had concluded, Erwin said: "Now I'll pray." Mr. Erwin's prayer was a peculiar one. It was delivered at the top of his voice, and consisted of an exhortation to the Lord to direct Ingersoll how to dispose of his vast wealth wisely. As he warmed up the pitch of his voice raised materially, and Mr. Ingersoll grew nervous, and urged him not to pray so loud, as it would bring those upstairs down. It was of no avail. The exhortations grew more fervent, and finally became howls. Then Ingersoll, with a despairing exclamation, sprang to his feet and said: "Stop praying, Erwin; here's your \$5." The devotions ended at once.—St. Paul Pioneer Press.

MR. JAMES P. WITHEROW, of Pittsburgh, Pa., has closed with the de Bardeleben Coal & Iron Co., of Birmingham, Ala., for a furnace plant similar to that of the Dayton Coal & Iron Co., of Dayton, Tenn., with the exception that the furnaces will be 17 feet bosh instead of 20 feet.

THE advertisement of Milton A. Smith in "Business Chances" presents an opening for a journalist.

MINING NOTES.

By T. K. BRUNN, Salisbury, N. C.

MINES IN MECKLENBURG COUNTY.

Mecklenburg county is rich in mineral resources, and the lines of vein matter may be counted by miles. The general character of the ores are sulphides of iron and copper carrying gold. The list is a long one and must take the place of further comment in this limited space:

*Hunter Mine—1½ miles south of Pioneer mills.

*Crosby Mine—1 mile southwest of above.

*Rogers Mine—4 miles southwest of Crosby.

*Hanes Mine—1½ miles south of above.

*Johnson Mine—8 miles southeast of Charlotte.

*Stinson Mine—7½ miles southeast of Charlotte; has both vein and placer deposits.

*Maxwell Mine—8 miles southeast of Charlotte.

*Ray Mine—copper and gold, 8½ miles southeast of Charlotte; also known as the "Baltimore and North Carolina mine."

*Rea Mine—gold ore, 8½ miles southeast of Charlotte.

*Frederick Mine—7 miles southeast of Charlotte. Ores of both gold and copper. was opened 1830, by Boston capitalists.

*Alexander Mine—5½ miles east of Charlotte.

*Ferris Mine—6 miles east of Charlotte.

J. P. Henderson mine—7 miles northeast of Charlotte.

*Nolan Mine—4 miles northeast of Charlotte.

*Caldwell Mine—near the above.

*Jordan Mine—10 miles northeast of Charlotte.

*Hipp Mine—6½ miles northeast of Charlotte.

*Henderson Mine—8½ miles from Charlotte.

*McGinn Mine—copper and gold ores.

*Capps Hill Mine—fine property. Means Mine—joins the above.

*Kerr Mine—10 miles from Charlotte; gold and copper.

*J. Alexander Mine—8 miles from Charlotte.

*Bennett Mine—1 mile west of Capp's Hill.

*Todd Mine—5 miles northwest of Charlotte.

Frazer Mine—4 miles northwest of Charlotte.

*Cathey Mine—5 miles southwest of Charlotte.

*G. C. Cathey Mine—8 miles west of Charlotte.

*Sloan Mine—adjoins the above; copper and gold.

*Steven Wilson Mine—10 veins; fine property.

*Gibson Mine—adjoins the above.

*Neal Mine—also adjoins the above.

*McLeary's Mine—Gold and copper ores.

*Juggernaut Mine—copper and gold ores.

*McCorkle Mine—8 miles south of Charlotte.

*Point or Blake Mine—brown or sulphide ores.

*Clark Mine—1½ miles southwest of above.

*Trotter Mine—southwest of above.

*Caner Mine—2½ miles southwest of Charlotte.

*Rudisill Mine—1½ miles southeast of Charlotte.

*Charlotte Mine—bold vein; near above.

Sam Taylor Mine—3 miles southwest of Charlotte.

*Martin Jeyhour's Mine—just beyond above.

*Dunn's Mine—9 miles northwest of Charlotte.

Carson Mine,

B. F. Wilson's Mine.
McDonald's Mine.
Kistler's Mine.
Grier Mine.
Davidson Mine.
Kerns, or Hopewell Mine.
Chapman Mine.
Vandever Mine.
Stinson Mine.
Magwell Mine.
Harris Mine.
Elliott's Mine.
Jordan Mine.
Reid's Mine.
Rhodes' Mine.
Howell's Mine.
Shuman Mine.

There will be several parties organized for the summer to go in search of gem stones in Alexander and some of the tra-montane counties. Emerald, and the light shades of beryl, ruby, sapphire, and the finer colored garnets and amethysts will be especially sought.

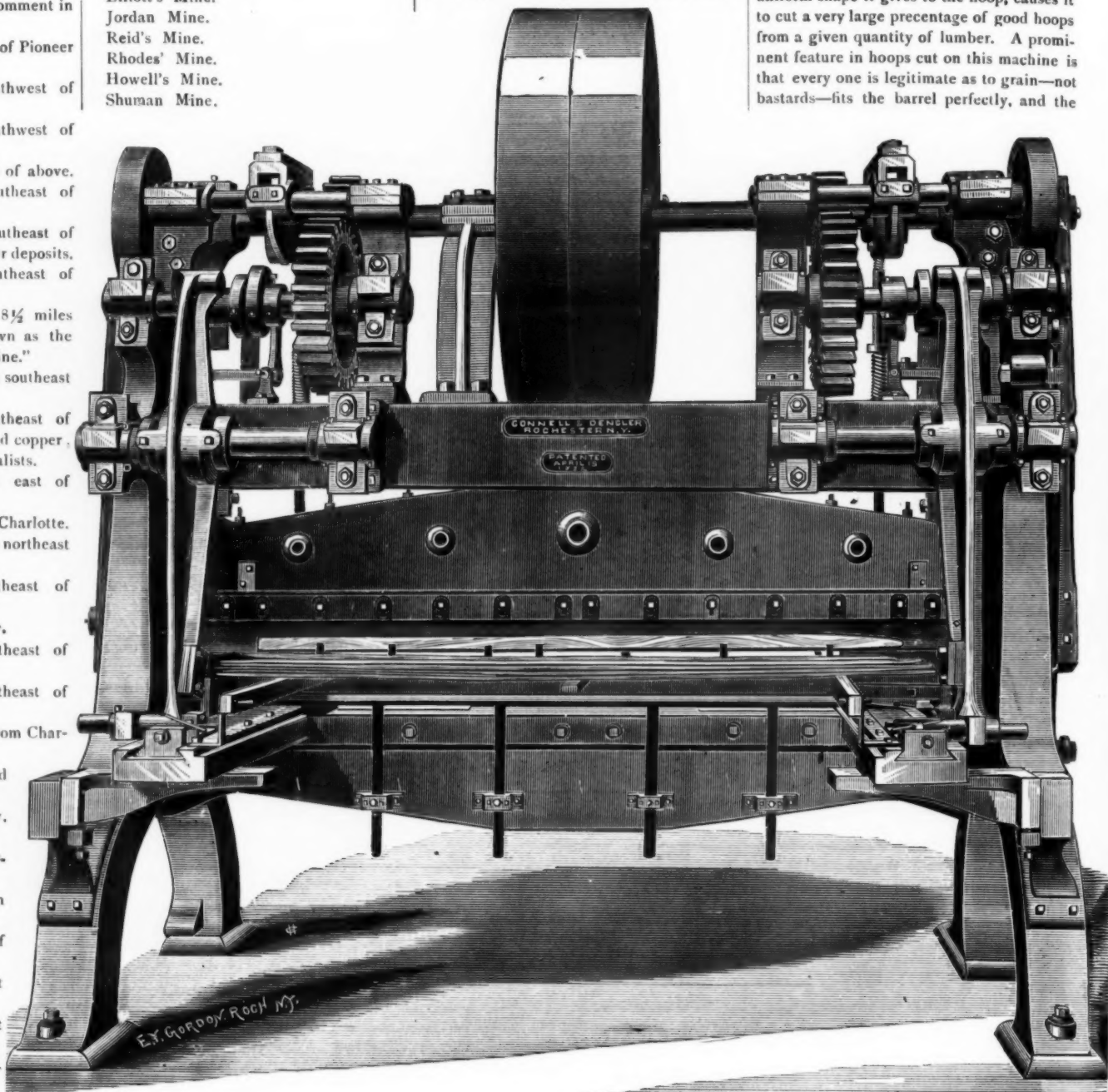
Connell & Dengler's Improved Hoop Cutting Machine.

This machine is made by Connell & Dengler, Rochester, N. Y., who state that it

tage of being pointed and lapped on the proper ends, which brings every point in the same direction, with the tapered side next the barrel, which latter is, in itself, a most desirable feature.

It dispenses with all the machines required for pointing and lapping, besides the hands necessary to operate them, not to speak of the room they take up, and power needed to run them.

The nicety with which it cuts, and the uniform shape it gives to the hoop, causes it to cut a very large percentage of good hoops from a given quantity of lumber. A prominent feature in hoops cut on this machine is that every one is legitimate as to grain—not bastards—fits the barrel perfectly, and the



CONNELL & DENGLER'S IMPROVED HOOP-CUTTING MACHINE.

These embrace all of the more important deposits of Mecklenburg county. Those marked * have shafts sunk, none of which are less than 30 feet. It is quite probable that others not so marked have shafts, but they are of no great depth. There are also other properties in Mecklenburg which have minerals, but on the veins of which little or no work has been done. There is work for the prospector in that and many other counties in North Carolina. Just at present there is more than the usual activity in the mines of that county.

THE BURNS MINE,

in Moore county, is reported as going on the English market soon. It has been worked with some success recently with the old fashioned chillian mills. After all this, slow process seems most reliable in this State. Gold Hill has not paid with any degree of regularity since the chillian mills and arastras were removed. The new management will doubtless not continue the same plans and processes used by the former management. This brings us back to the Burns. Should the property fall into English hands, it may suffer from a change of plant and plan. Such is not infrequently the case, and often the most disastrous results follow.

is designed to meet the necessity for a machine that will produce a better hoop than is ordinarily made, and at a reduction in the cost of manufacture.

The distinctive feature of this machine is the manner of pointing and lapping the hoop, which is done by an ingenious system of knives operating alternately, cutting the point at one end, and at the same time thinning it, and the lap at the other, each operation being performed on the board and before the hoop is cut off. The advantage of this plan will readily be seen, as the lap can be made as thin as necessary, while the point can be made any desired shape.

The following claims are made for it: "A perfect hoop can be made every time the knife comes down, and consequently a large amount of labor saved, as this machine, in forming a complete hoop by pointing and lapping it before it is cut from the board, has the effect of doing away with several machines used for that purpose, and also with the presence of boys to run them.

Hoops can be cut with this machine, properly tapered, with the additional advan-

points always run in the same direction, giving a uniform and handsome appearance to the barrel."

An engraving of the machine is shown on this page.

WINFIELD, PUTNAM COUNTY, W. VA.,

April 8, 1886.

Editor *Manufacturers' Record*:

In looking over the advertising pages of the *MANUFACTURERS' RECORD* I do not find any advertisement of any one who offers tobacco manufacturers' supplies, such as presses, shapes, etc., for sale. Would like to correspond with some one dealing in such articles.

Respectfully,
MIDDLETON, ROBERTS & CO.

GREENVILLE, N. C., April 6, 1886.

Editor *Manufacturers' Record*:

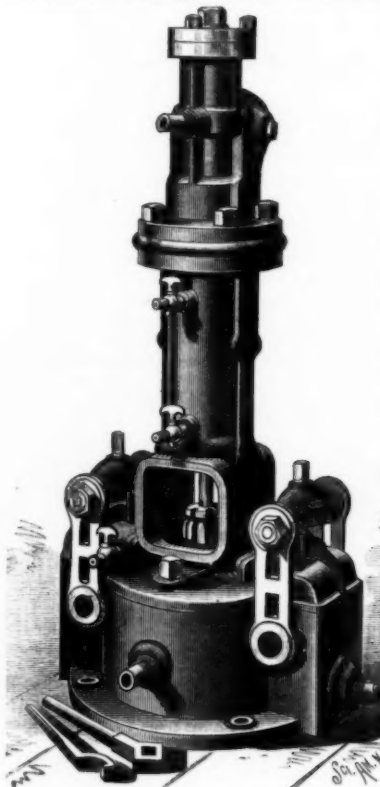
Please put us in correspondence with several iron dealers, and where we can buy the cheapest.

SUGG & ORMOND.

☞ *Subscribe to the Manufacturers' Record.*

Empire Steam Pump.

We illustrate on this page the steam pump made by the Empire Steam Pump Co., 12 Cortlandt Street, New York, and designed for all purposes requiring the use of a pump. For feeding boilers, pumping hot water, &c., filling tanks, for fire, mining



EMPIRE STEAM PUMP.

and marine purposes, for hotels, theatres, railroads, oil lines, tanneries, breweries, manufactories, steam yachts, steam boats, &c.

The following description of it and claims for it are taken from the company's catalogue:

"The Empire Steam Pump, as is shown by the cut, is vertical.

water valves, though possessing the same advantages to produce a steady flow as the double-acting pump, and by reason of the quick return of the piston, and forming a vacuum on the up and down stroke. There is no motion of any kind in view except the main piston rod, which is exposed between the stuffing boxes, and that is entirely covered when desired for mining and other purposes.

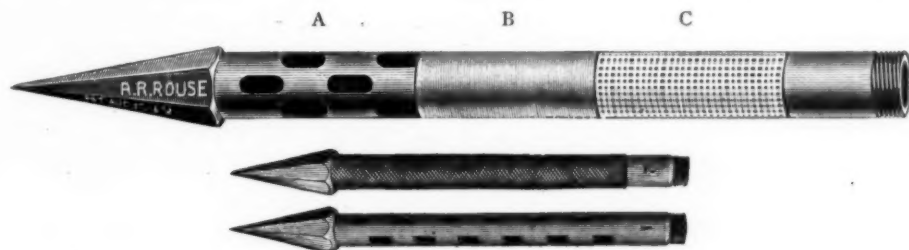
The steam piston cushion upon exhaust steam entrapped in the ends of the cylinders by reason of the pistons passing beyond the exhaust ports, the inlet ports at the ends of the cylinder being closed by the main steam valve—the cushion of the pistons, in fact, being so effective that the whole load against which the pump is working may be suddenly thrown off, while having on a full head of steam, without any danger of the pistons striking the cylinder heads, or in any other way injuring the pump.

The main steam piston has the primary function of transmitting working power, and the secondary function of a slide valve, to operate the main steam valve, and the main steam valve has the primary function of regulating steam to the main steam piston, and the secondary function of a piston operated in turn by the working piston, the two being connected only by a system of steam ports.

This pump being vertical all foreign substances pass under or below the piston, thus preventing all abrasions or cutting. The pump is so arranged that a different water cylinder may at any time be put in with a trifling cost if greater power or greater capacity is desired without the expense of a new pump."

Driven Well Points.

The advantages of driven wells over ordinary sources of water supply are universally admitted. In a well that is dug, the water is liable at any time to be contaminated from surface drainage or seepage, and thus become a source of disease, or in a protracted drought the stream may be exhausted and the well run dry. These objections do not apply to a driven well, which is the best



DRIVEN WELL POINTS.

One of the most prominent peculiarities of this pump is the automatic valve gear and quick return plunger.

Its steam valve is operated without the aid of tappets, compound levers, cams or metallic connections of any kind.

It neither strikes a blow nor operates suddenly upon the plunger, the steam being registered to the cylinder by an arranged system of ports whereby the piston cushions noiselessly upon exhaust steam at the end of each stroke. The said piston moves gradually for an instant until the water valves close and then completes its stroke with increased speed.

There is no outside moving gear or delicate adjustment.

In the steam chest there are but two pieces—a slide valve and a differential piston to move the valve, which constitutes the entire valve gear.

The steam piston and the water piston are made of suitable material as the various duties demand.

The stuffing boxes and water valve seats are made of composition; the links and bolts that hold the valve case bonnets are steel, and all other bolts are case-hardened.

The supply, exhaust suction and discharge openings are right and left. It has but two

method yet devised for securing an unfailing supply of pure water.

The cuts shown herewith represent the patent electroplated well points made by the patentee, R. R. Rouse, Indianapolis, Ind. A showing the openings (for admitting water) before the wire cloth or perforated brass is soldered on $1\frac{1}{4}$ inch by $\frac{3}{4}$ inch holes. B showing section after wire cloth has been soldered on. C showing section after both wire cloth and perforated brass have been soldered on. These $1\frac{1}{4}$ points (caliber) are electroplated with pure block tin inside and outside before receiving the coverings, there being no raw iron to corrode or rust or cause an unpleasant taste to the water. The electric process, by which it is done, is patented and exclusively owned and controlled by Mr. Rouse for driven well points in the United States.

Those who have any doubts as to the successful working of a driven well, may learn something from the experience of a certain Western farmer. Some time ago one of R. R. Rouse's men was driving a well in front of a hotel, in a village not far from Indianapolis. A farmer, coming along and learning that that small pipe driven into the ground was to be a well, offered to pump it dry in half an hour. The well man agreed

to pay him \$1,000, when he succeeded in doing so, and placed \$1,000 cash in the hands of a bystander for that purpose. The farmer went to work with considerable alacrity; when he got tired he employed one or two friends to help him. He was so confident of winning the \$1,000 that, in their intervals for resting, he ran up a considerable bill at a neighboring bar-room, treating his friends, who, of course, grew to be quite numerous about that time. The half-hour lengthened into hours, and the farmer toiled on. He did not win the \$1,000, however, and that well has been running ever since a clear cool stream of pure water.

Mr. Rouse ships large numbers of his well points to the South, particularly to Florida, Georgia and the Gulf States.

Thurston's Standard Railroad Oil Testing Machine.

This machine has been specially designed to provide means for reliable and systematic investigation of the value of the various lubricating oils used in railway service, and for all purposes for which it is essential to reduce to a minimum the friction of bearing surfaces under heavy pressures, securing economy in power required in overcoming this factor of resistance to motion, and determining the best, and consequently the cheapest, oils for lubricating purposes.

Additional advantages secured in this machine are those due to rigidity and careful fitting of the separate parts; while the whole machine is arranged with special reference to convenience of operation.

The journal, which is Master Car-Builders Standard, $3\frac{3}{4}$ in. diameter, is a hardened steel sleeve, ground perfectly cylindrical. The boxes in which this journal runs are of phosphor bronze, and are designed for internal water circulation.

A late improvement includes a thin lining of phosphor bronze or other metal ordinarily used, which can be accurately weighed before and after a test, thus determining the percentage of wear for any given metal and mileage. The linings are made perfectly interchangeable, and can be renewed at any time, or special linings of any other metal or alloy may be inserted, using the same water brasses.

Pressures up to 9,000 pounds are obtained by the use of a heavy helical spring secured within a 4-in. wrought-iron pendulum tube. By a convenient taper-key adjustment, (not shown in cut,) the pressure may be easily and quickly relieved for removal of the pendulum and brasses, for inspection of the latter, or of the journal, without release of pressure of the spring within the tube.

The standard water brasses may be replaced by the ordinary brasses used in freight or passenger service if desired, giving actual conditions, in this respect, under which the test may be conducted.

Friction at the surface of the journal is indicated on a graduated arc, conveniently placed above the pendulum.

Friction between the surfaces of the journal and the brasses tends to rotate the heavy pendulum; hence to give as great a range as possible, and to enable the observer to note small changes of resistance, a form of compound pendulum is adopted, as shown in the illustration.

A standard thermometer, graduated 40° — 350° Fahrenheit, and Centigrade to correspond, is inserted to indicate, as nearly as possible, the exact temperature of the surfaces in contact. A positive automatic revolution counter is attached, registering up to 1,000,000, affording ready means for determining the comparative mileage run during any investigation.

Speeds, corresponding to rates usual for train service, either freight or passenger, are obtained by the use of a counter shaft,

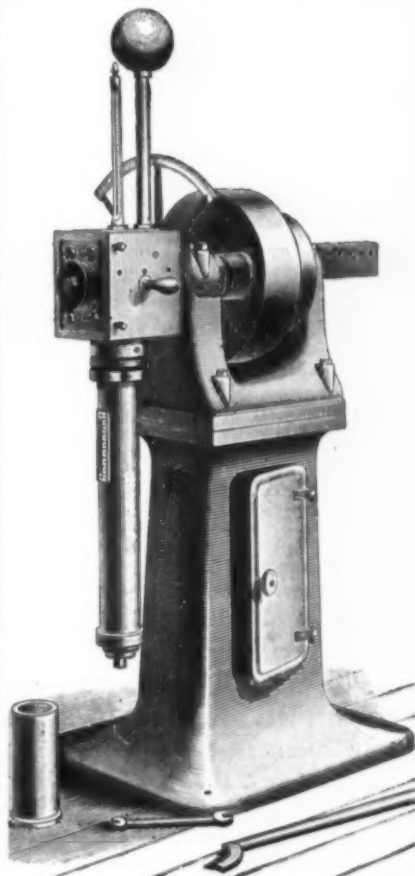
being two pairs tight and loose pulleys, 10 in. diameter, $6\frac{1}{2}$ in. face and 18 in. diameter, $4\frac{1}{2}$ in. face, respectively. A two grade cone, $4\frac{1}{2}$ in. face, gives ample belt efficiency for the four speeds thus obtained.

As a valuable office hand-book, covering this important subject, we would refer to Professor R. H. Thurston's "Friction and Lost Work in Machinery and Mill Work," published by John Wiley & Sons, New York.

The Standard Railroad Oil Testing Machine is now made by the Pratt & Whitney Co., Hartford, Connecticut.

Railroad Movements in Virginia and North Carolina.

Neither the State debt, local-option, nor the discussion of any other question can stay the purposes of the people of the Southside and the Southwest in their movements preparatory to building new leading and auxiliary lines of railway. The plans are comprehensive, and concern North Carolina to a large extent, and Georgia, and trade centers of the Gulf States to a degree which has called out concerted action with the Virginians who are looking forward to the establishment of a great railroad centre West of the Blue Ridge mountains, which shall be, also, a leading commercial and manufacturing city. Taking Roanoke as a base, the trunk-line South will be on a higher parallel than the Piedmont, and opening in extension to Asheville, N. C., and Atlanta, Ga., a continuous line, which will have its Northern and Northwestern connections by the Baltimore & Ohio and the Shenandoah Valley railroads. Then there are branches or connecting-links which, whether wholly or partially carried out, will materially change the map of Virginia and North Carolina in the transportation routes of the present time, and will build new marts of commerce, and open new industrial fields



THURSTON'S OIL TESTING MACHINE.

and furnish tonnage and travel for the lines traversing the Virginia Valley.

The leading line from Roanoke to Asheville is called the Roanoke & Southern Railroad, and will develop a country rich in resources, now scarcely opened at any point. It will cross the Danville & New River line at Martinsville, in Henry county. That rich little county helped to build the D. & N. R., and is now prepared to take stock as a

county, as it has largely done by individual subscriptions.

The Danville & Northwestern is a line projected from that city to Big Island, Bedford county. This point is twenty miles above Lynchburg, on James River. This projected line crosses Pittsylvania and Bedford counties, giving Danville a direct connection through the Richmond & Alleghany with the Baltimore & Ohio system and the Shenandoah Valley line.

Lynchburg is working up a direct Southern line in her own interests from that city through Campbell and Halifax counties, in Virginia, and Person and Orange counties, North Carolina.

The Danville & New River R. R. has leased a feeding-line, which branches West of Danville, running to Leaksville and Mocksville, North Carolina.

The Atlanta & Danville R. R., which commences on lower James River, at Claremont, a new port and a growing commercial and manufacturing town, is completed to Greensville county, and the City Council of Danville proposes to take one hundred and fifty thousand dollars of stock on its completion to that city. The aim of this line is through the Danville & New River to Bristol and thence by the road now building from that town to Big Stone Gap, in Wise county, to form a due West and direct route from this new port on James River to the Kentucky line.

The Norfolk & Western is preparing for extension from Pocahontas across West Virginia to Kentucky, and it is supposed this will be commenced as soon as the Cripple Creek auxiliary line shall be completed.

There is concert and great activity in all of these schemes, and it may be affirmed that all will ultimately be accomplished, except the Danville & Northwestern, and that will be, if Bedford county chooses to give it the help she is able to do.

In addition to this, greatly improved water-transportation by the Stanton river is annually increasing. There are two steamers now on that river, ascending the stream as high as Brook Neal, in Campbell county. The Stanton is always in the Congressional appropriation for rivers, receiving this session of Congress ten thousand dollars.

It will be observed that the chief of these several schemes is the prolongation, South, of the lines which run through our Valley. By the way, the county of Roanoke, whose subscription to the Valley Road is now barred by injunction, is considering the question of asking a revocation of the injunction and proposing to invite Mr. Spencer to come on and finish the connection and have the B. & O. line take its proper place in the further schemes Southward.

It would make this article too lengthy to bring out all there is of interest to our section of the State in some of these schemes, and to refer to the varied resources of the country which will be opened by them. At no former time was there ever so much activity in the Southside and Southwest of the State in planning schemes of development—nor, indeed, is its parallel to be found in the history of the Commonwealth.—Staunton Spectator.

CHARLOTTE, N. C., April 13, 1886.

Editor Manufacturers' Record:

Without disparaging the efforts made by working people in other sections of the country, it is fair to assume that the agitation of strikes and the stirring of strife in the South, by persons who represent no other interest than their own, is out of place, and rather an insult to the toilers who, in the milling district of North and South Carolina, are as happy as people can be. Therefore, the man who dares to invade these precincts, with the fallacious idea, that by "agitation" he can improve upon contentment, does that which he knows at heart is wrong, and is strewing a fire brand, in very combustible material. Your correspondent has in mind a Mr. Hover, who called a meeting of laboring people in this city last week, at which he pictured, in an address to them, the various successes met with by strongly organizing the labor element of the North. Many of his hearers absolutely believe that the doctrines of the communist had crystallized into facts, and at some central point the division of wealth was being made, and that he who was once poor and happy was now wealthy and worried over how to invest his income. Men who never before thought of strikes, but only of exercising their right to quit work if it didn't suit them, now consider it the acme of a more enlightened privilege to bring trouble to themselves and suffering upon their families. Mr. Hover was honest enough to say that he was an unauthorized "sand lot" orator, not representing the Knights of Labor, nor in fact any organization. A remarkable finale to the evening was a collection taken up for the benefit of the speaker.

It is to be hoped that the wage workers of the South will observe calmness in the consideration of a subject so likely to dethrone the reason of the average toiler. They are unprepared for it, and its being forced upon them to stimulate orders by increased numbers only is indulging in a play at the expense of human happiness. Were there causes for intervention between the employee and employer, the people of the South understand that the MANUFACTURERS' RECORD, with its well-earned reputation for fairness, would be an arbiter, and its judgments would appease the strife calling for them. Therefore let us indulge in the hope that the laborers of the North will confine themselves to the district needing their noble protection, and let the peace and prosperity, which now marks the New South, roll on undisturbed.

A TOILER.

ATLANTA, GA., April 8, 1886.

Editor Manufacturers' Record:

We have recently adapted our lumber drier to drying brick with perfect success. Brick are loaded from the mould on to the cars and are then rolled into driers, dried, and rolled on same cars into the kiln and pitched direct from cars to men stacking brick in kiln. There is great saving in labor and the cost of fuel for every 25,000 brick is only an average of \$3. Time required to dry average brick is only ten hours. The house is built in sections, so that when one

section is loaded, heat is applied while you are loading the next, and so on, until the day's work is completed; in that way taking only ten hours to dry each section, so that in case we have a difficult brick to dry without cracking, we have fourteen hours to spare for each section, which we can, if necessary, consume any part thereof in applying a slower heat that would ordinarily be required and have plenty of time in which to dry without cracking the most difficult brick that we have yet any knowledge or can conceive of. The total cost of a drier of 25,000 brick capacity per day, including all tracks, cars and royalty, should not be over \$2,000. We claim we have no competitor as to cost of operating drier, and that we have every convenience necessary or known, and dry brick perfectly. Moreover we stand ready to put up one section of drier at any responsible man's yard in the country at our own cost and test his own brick without cost to him if it does not do what we claim for it.

COLE LUMBER DRIER CO.

BEAUDRY'S UPRIGHT CUSHIONED



Power Hammer,
BY FAR THE BEST!
Blow accurate, powerful and elastic.
Will increase the profits of any shop.
70 Kilby St.,
BOSTON, MASS.
Beaudry & Cunningham.

WANTED.

Second hand turbine, 20 horse power, shingle machine, small circular saws, and lath saws; also gas and water piping.
Address, J. T. PATRICK,
RALEIGH, N. C.

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MANUFACTURERS OF

Marble Monuments

Tombs, Altars, Counters,
Furniture Slabs, Mantels, Tiles.
Estimates and Drawings Free.

A. WILSON, YACHT SAIL MAKING, EXCLUSIVELY.

440 Atlantic Avenue,

Boston, Mass.

THE RED JACKET STEAM BOILER

Flue Blower

Is the Cheapest and Most Reliable Flue Cleaner in The Market.



Simple in Construction Easy to Operate. Economizes Fuel and Increases Boiler Capacity.

This Flue Blower operates on an entirely new principle; is easily controlled by one hand. It stands without a rival and is pronounced by engineers the only perfect cleaner made. Write for sample and prices to

STEWART HEATER CO., 19 & 21 Clinton St., Buffalo, N. Y.

THE SCIENTIFIC PORTABLE FORGE

BLACKSMITH HAND BLOWERS.

GUARANTEED

The Lightest Running! The Strongest Blast! The Most Durable!

ADAPTED TO ALL KINDS OF WORK, AND MADE IN STYLES AND SIZES TO SUIT.

THE FOOS MANUFACTURING CO., - - Springfield, Ohio.

Cash Bids Wanted

FOR CONSTRUCTION OF AN

Iron Blast Furnace

(100 Tons Daily Capacity.)

At Sheffield, Colbert Co., Ala.

Construction to begin not later than July 1, 1886. Bids, with plans and specifications, must be submitted by May 15, 1886. Before preparing plans, bidders are requested to examine Furnace Site, which is on South Bank of the Tennessee River, adjacent to the Sheffield Landing.

The Company reserves the right to reject any and all bids, &c. Address

SHEFFIELD FURNACE CO.
Sheffield, Colbert Co., Ala.

NOTICE.

Fine location for furnace, factory or mills of any kind, for sale. Splendid improved water power. Inexhaustible quantities of best brown Hematite Ore. Two new railroads through the place. Address, WM. H. HUNTER, GREEN FOREST, VA.

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Works, 4, 6, 8 & 10 West Street, Cleveland, O.

Manufacturers of Machines for Making Ice and for Refrigerating Breweries, Pork Houses and buildings of all kinds requiring a steady, low temperature. Over 100 of our machines now in use. Send for any particulars desired. P. O. Box 92, Cleveland, Ohio, or P. O. Box 348 Cincinnati, Ohio.

FOR SALE!

Mountain Shoals,

One of the Best Water Powers in the Southern States. Sufficient land for manufacturing purposes. For further information apply to

L. & A. KOPPEL, Laurens C. H., S. C.

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ALWAYS ASK FOR
ESTERBROOK'S
CELEBRATED
STEEL PENS.

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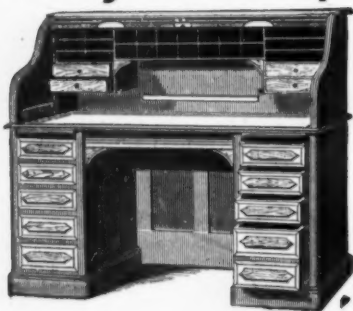
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Derby Roll Top AND Flat Top Desks



The BEST and CONSEQUENTLY THE CHEAPEST OFFICE DESK IN THE WORLD.

Derby & Kilmer Desk Co.,
Manufacturers.

OFFICE AND WAREHOUSES:

55 to 65 Charlestown St.,
BOSTON, MASS.

Illustrated Catalogue on Application

Business Chances.

42 For the purpose of making the **MANUFACTURERS' RECORD** a still more valuable medium of communication between its readers North and South, we will publish, **FREE OF CHARGE**, short advertisements, not exceeding 40 words, from those in the South who have good business openings that they wish to bring to public notice, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these columns, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers, superintendents, engineers, &c.

In corresponding with any of these advertisers please mention the **Baltimore Manufacturers' Record**.

Parties advertising in this column must have replies sent to their own address, and not to care of Manufacturers' Record, unless stamps are sent for forwarding replies. Advertisements sent not in accordance with this requirement will not be inserted.

WANTED—To correspond with capitalists in reference to the building of an important railroad link of 20 miles, uniting two main trunk lines and developing valuable resources. Eight miles already graded. Piers and abutments built across a river. Charter and right of way will be transferred free to party or company who will complete the connection. Address A. F. Naff, Greenville, Tenn.

WANTED—A party with small amount of capital to join in starting a factory of knit goods with Lamb or some other good, low-priced knitting machine. To the right party understanding the business a location will be furnished; also a nice building lot for a home given. Address A. F. Naff, Greenville, Tenn.

WANT the address of manufacturers of coffee pots, plain and fancy. Also of lamp burners. Send catalogue with prices to H. G. Hall, Gatesville, Tex.

WANTED—A Partner with some capital to engage in the shoe business in Raleigh, N.C. Present proprietors desirous of enlarging their operations. They have control of the State convicts, which can be used to advantage in manufacturing shoes. Address, Shoe Manufacturer, care of J. T. Patrick, Raleigh, N.C.

WANTED parties who propose locating South to address me at once for bargains in real estate. Col. R. C. Watts, care Bael & Watts, Attorneys at Law, Laurens C. H., S. C.

PATENT RIGHT FOR SALE OR TRADE—Valuable patent for releasing runaway horses from vehicles; a life-saving appliance. Money in it if properly pushed. State, county or town rights for sale, or will trade. Address F. Binford, Box 22, Owensboro, Ky.

A THIRD OR HALF PARTNER WANTED in a long (40 years) established clothing business at the North Carolina State capital. The business is the best in the city. Address, with references, Front Street, care of J. T. Patrick, Raleigh, N.C.

WANTED—Capital to invest in a hotel, where a guarantee of 10 per cent. will be given for five or ten years on money invested. Address J. T. Patrick, Commissioner Immigration, Raleigh, N.C.

WANTED—A capitalist to buy an interest in a corn harvester, in order that the inventor may place in the market this great and useful invention. It is to a corn field what the mower and reaper is to a wheat field. For particulars write to Ed. S. Jones, P. O. Box 91, Pulaski, Tenn.

PARTNER WANTED in a furniture factory in the South to travel; capital required \$5,000 or \$6,000; business already established; fine opportunity. Address Furniture, care MANUFACTURERS' RECORD.

FOR SALE—My mill burnt down January 29, 1886, and not having capital enough to rebuild, am desirous to sell the site. It is an excellent water-power; good dam; good wheat section; pleasant neighborhood; water-wheels are good and new. For further particulars address C. Lehman, Leitersburg, Washington Co., Md.

SITE and Water Power Free to a woolen, cotton or other manufactory in one of the largest towns in Texas. There is also a fine opening for a cotton compress. Address, J. Jukes, 603 Avenue B, San Antonio, Texas.

I WISH to sell Seven Thousand Acres Finest Woodlands in the South. Woods comprise countless thousands of White, Post, Red and other oaks, Hickory, Pine, Ash, Cypress, Maple, Gum, Walnut, Sycamore, etc., etc. Want mill men and lumber merchants throughout the United States to communicate with me at once. E. B. C. Cash, Cash's Depot, S. C.

WANTED—To learn of a good opening for the establishment of a large saw mill in Eastern Tennessee or Western North Carolina, where there will be abundance of timber for several years' work, and near transportation. H. F. Burt, Elizabethton, Tenn.

WANTED—A party with \$50,000 to join the advertiser in a strictly cash manufacturing business. Sales are made daily, and will aggregate during the season, which lasts six months, \$1,000,000. Location, Paris, Texas. Address, C. H. Merry, care F. & M. Bank.

PARTNER WANTED with capital to further develop valuable mineral springs and resort property in the South; or will sell out. The water is gaining a wide reputation for its general curative properties, and the place is rapidly growing in popularity as a summer resort. Address H. P., care MANUFACTURERS' RECORD.

WANTED—A practical man with \$500 to \$1,000, to take half interest in an established wagon and plow manufacturing establishment in a thriving village of North Carolina—a railroad center. Address Wagon and Plow, care J. T. Patrick, Commissioner Immigration, Raleigh, N. C.

WANTED—A partner with \$2,000 capital in a handle factory, now established with good trade; have a good water power. Timber very cheap and location good. Address G. W. Simpson, Salisbury Furnace, Botetourt county, Va.

A GOOD CHANCE FOR INVESTMENT—A daily and weekly newspaper in one of the most progressive manufacturing towns in the "New South" is offered for sale at a bargain. An excellent chance for the right man to make money. Very little capital required. Satisfactory reasons given for wanting to sell. Apply to Milton A. Smith, Anniston, Ala.

FOR SALE—A furniture and mattress factory, with steam engine and machinery complete for both departments. Labor and materials cheap. Suitable factory and warehouses, with good dwelling-house, two wells of excellent water and out-buildings on the premises. The owner is getting old and is in feeble health and wants to retire. For particulars and price apply to John Wilson, Statesville, N. C.

THE Talladega Oil Mill & Public Ginnery is offered for sale, or would form a stock company for manufacture of fertilizers and soap. Correspondence solicited. W. E. Yancey, Talladega, Ala.

VALUABLE COAL PROPERTY FOR LEASE in Montgomery county, Va., two miles from railroad. Address Chas. C. Kasey, New River Depot, Va.

WANTED—A reliable man with \$1,500 cash, to engage in a lucrative business, in a great business center in the South. Address Energy, care of MANUFACTURERS' RECORD, Baltimore.

FOR SALE—1 Ring Twister, 8 Patent Twisters with spools, shafting, pulleys and belting, for making patent seine twine from 9 to 36 threads. Part of the machinery run less than two months. Will be sold for half its value. Address, Gillette Twine Co., Mount Verd, Tenn.

WANTED—To sell a newspaper outfit very cheap. Also want to know of some locality desiring a weekly newspaper. Address, E. S. J., P. O. Box 91, Pulaski, Tenn.

WANTED—A partner with \$5,000 or \$6,000 to engage in a very profitable manufacturing business. Special inducements will be given to right party. Large demand and good profit. For particulars address H. L. Freeman, Concord, N. C.

METAL-WORKING MACHINERY, New and Second Hand, on Hand.

12 in. S. x 5 ft. Engine Lathes, Prentice.
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36 in. x 36 in. x 12 ft. Planer, Niles.
20 in. Swing Drill, Prentice.
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3 and 4 Spindle Drill, Garvin.
Brown & Sharpe Universal Miller.
Plain Miller, Lincoln Pattern.
No. 3 Miller, Garvin.
No. 5 Miller, Brainerd.
1 1/2 in. Cutting-off Machine, Pratt & Whitney.
No. 2-3/4-4 Stiles Punch Presses.
Also a line of New Tools all kinds. We are always glad to correspond, and if parties desiring to purchase will write, stating just what they want, we will be glad to name prices on either new or second hand.

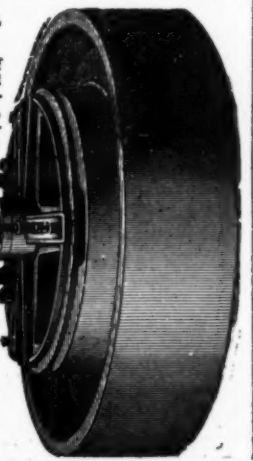
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Manufacturers of
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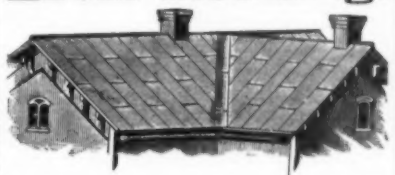
Get the Best at First.

The Holyoke Machine Company, of Worcester, Massachusetts, advertise in this issue their well-known Hercules Water Wheel. This wheel has many points of merit that strongly commend it to the attention of those who use water power. The most thorough tests have demonstrated its many good qualities. In Holyoke it is the standard water wheel, the aggregate horse power of the Hercules wheels in operation there being greater than that of all other wheels combined. These wheels are very popular in the South as well as in the North, having been in use for many years in a large number of Southern mills. There are four of the Hercules wheels now in operation in the big cotton mills of the Eagle & Phenix Manufacturing Co., Columbus, Ga., and Mr. John Hill, of that company, in writing, Feb. 25, 1885, to the Holyoke Machine Co., said: "Within the past four years I have ordered four Hercules' wheels, all of which have given the purchasers entire satisfaction. Three of the wheels are on regular duty in the Eagle & Phenix Mills. The first wheel ordered did so well that a 'Hercules' wheel has been added each time a new wheel was wanted. In the Eagle & Phenix Mills I supervise twenty water wheels of six different styles. The 'Hercules' is by far the most durable and best made wheel in use here, and, in fact, I know of no wheel its equal mechanically. It is all that can be desired in economy of water. In fact, it is a strictly first-class wheel in every way, and the wheel to buy, use and depend upon."

That is a pretty strong letter, but it is only a sample of letters received by the manufacturers of this wheel. Among the recent shipment of wheels have been two—one a 34-inch and one of 60-inch—to a Georgia cotton mill. Two Hercules wheels are being put in at Natick Cotton Mill, and one at the Arctic Mill of B. B. & R. Knight near Providence. This will make eleven wheels furnished to this well-known firm, one of the most prominent in the manufacturing line in New England. Hercules wheels are sold in England, Ireland and Scotland, and on the Continent, a cable order having been received only a few days ago for one to go to France. The manufacturers say: "The Hercules gives the most power for its size and the highest average percentage from full to one-half gate of any wheel ever made." Their advice to all users of water wheels is to "get the best at first." If you are interested in water wheels, if you want a new wheel or a larger wheel, or a better wheel than you are using, write to the Holyoke Machine Co., Worcester, Mass., for catalogue No. 3.

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MACHINERY
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SHINGLES,
HEADING and STAVES,
And Improved
GAGE LATHES
For
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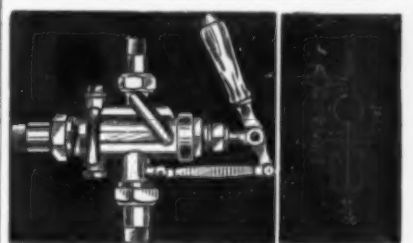


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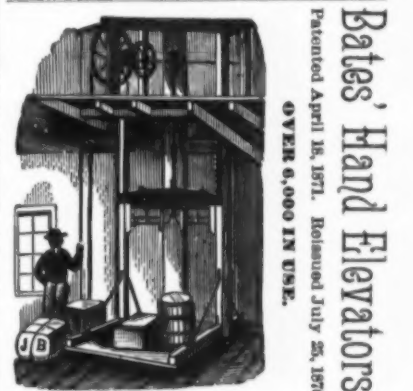
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Simple, durable, economical, perfect, fully guaranteed Catalogue. Agents wanted everywhere.
Best CORN MILL in the World for plantation and farm purposes.
Stationary Engines from 6 to 100 Horse Power
Portables from 4 to 25 H. P.
COMMON SENSE ENGINE CO.
Springfield, Ohio.

Reliance Alarm Gauges.

The only combined High and Low Water Alarms in Existence. Marvelously simple, and simply perfect. Obviate explosions, burning of flues, overflows, etc. A low gauge of water can be run with perfect safety, thereby securing better steam and saving fuel. Chamber at bottom catches all sediment. Nothing to get out of order. Never fails to give alarm. Send for illustrated price list.
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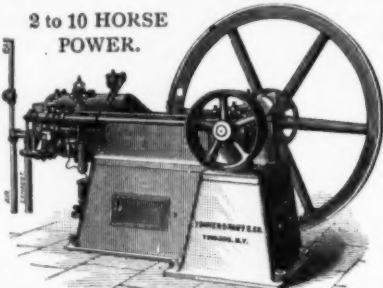
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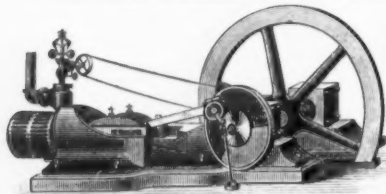
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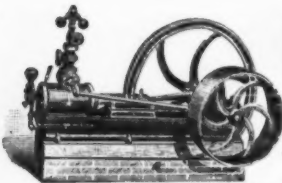
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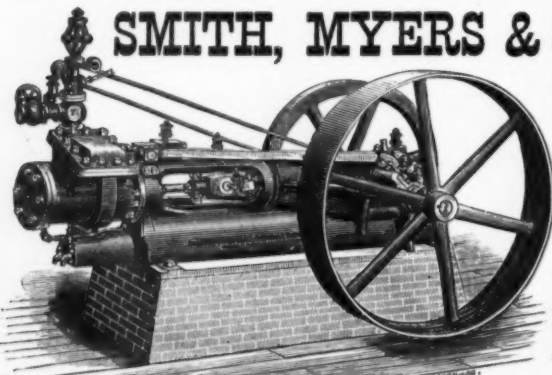
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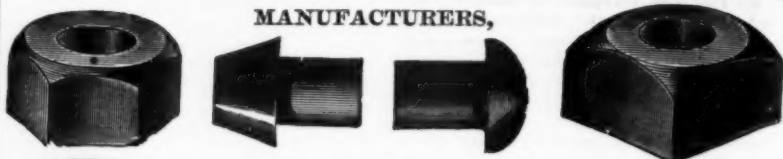
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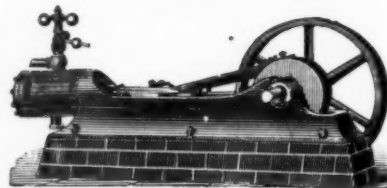
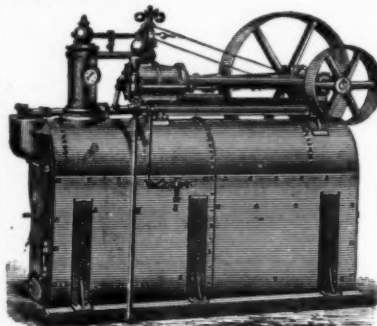
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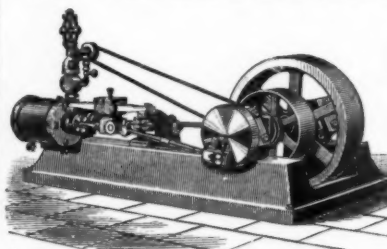
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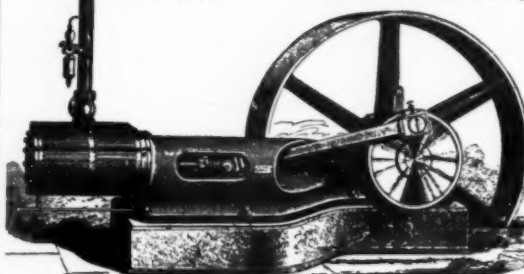
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GIVE US A TRIAL, and for toughness of temper, durability and quality of
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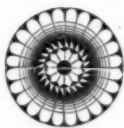
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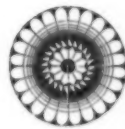
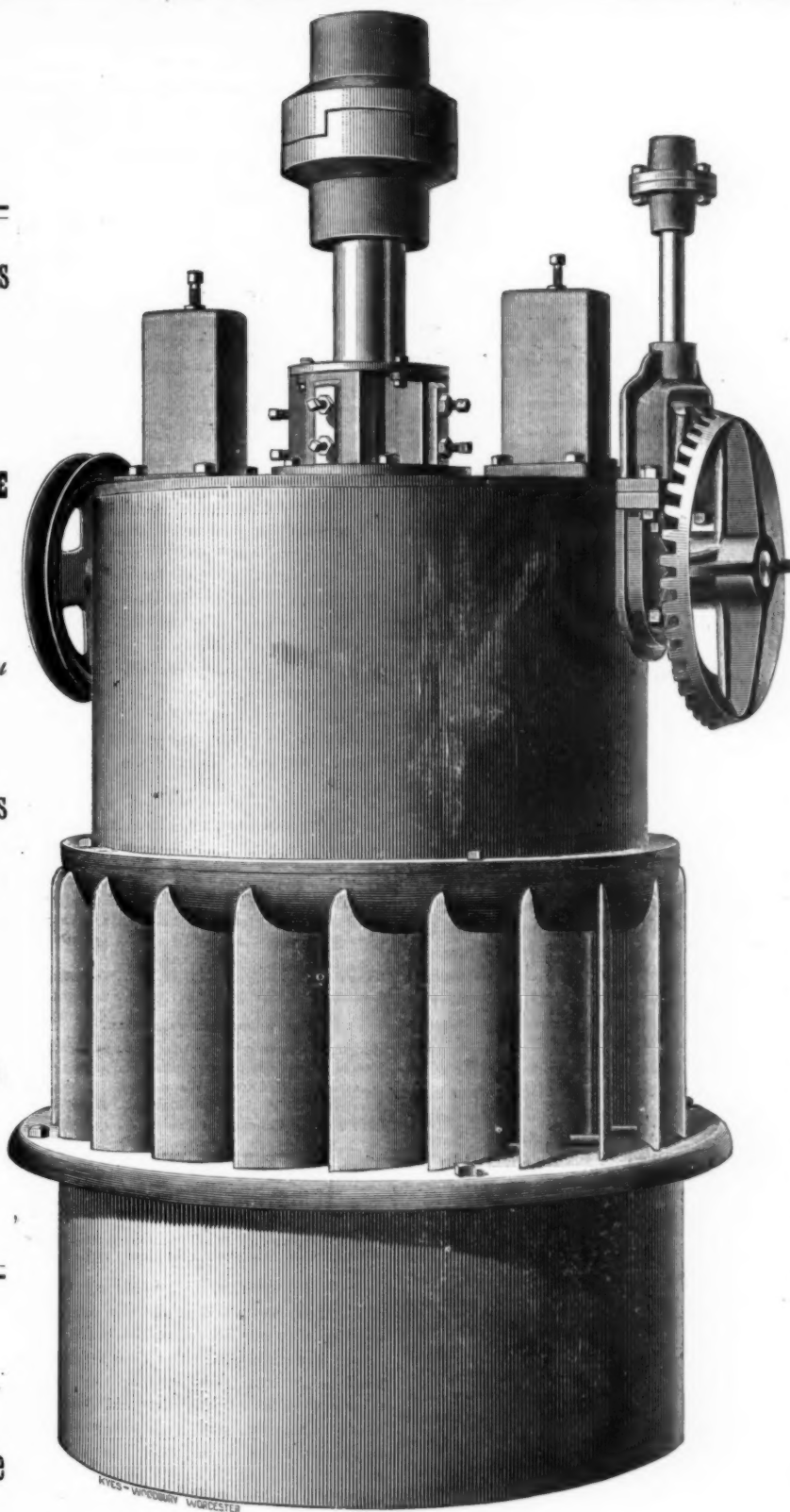
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Holyoke, and use the wheels
as a gauge or meter for mea-
suring the water to the
manufacturers and charge
them for the actual quantity
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that the HERCULES stands
first in the estimation of
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economical wheel in the use
of water for the amount of
power produced. The HER-
CULES, we believe, is the
only wheel of which all the
sizes, both right and left hand,
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them many times, and all
brought to the standard of
excellence which has been
set by the makers and de-
manded by their customers.



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THE HERCULES WATER WHEELS

THE HEAD OF WATER ON THE WHEELS AND THE POWER FURNISHED BY THE HOLYOKE WATER POWER CO.:

	Diam. in inches.	Head on Wheels.	Horse Power.	Date of Setting.
Albion Paper Company.....	39	25	295	1878
Albion Paper Company.....	24	25	115	1883
Albion Paper Company.....	45	27	445	1880
Albion Paper Company.....	30	27	200	1883
Chemical Paper Company.....	4-30	23	620	1880
Chemical Paper Company.....	5-18	23	275	1880
Chemical Paper Company.....	33	23	185	1880
Chemical Paper Company.....	42	23	305	1880
Chemical Paper Company.....	2-48	23	800	1880
Connecticut River Pulp Company.....	36	18	155	1881
Crocker Paper Company.....	39	25	300	1883
Farr Alpaca Company.....	48	19	300	1878
Franklin Paper Company.....	39	20	215	1883
Geo. R. Dickinson Paper Company.....	2-45	19	520	1883

	Diam. in inches.	Head on Wheels.	Horse Power.	Date of Setting.
Geo. R. Dickinson Paper Company.....	36	19	170	1883
Holyoke Water Power Company.....	30	19	115	1882
Holyoke Warp Company.....	48	11	130	1879
Massachusetts Screw Company.....	27	19	90	1882
Merrick Thread Company.....	48	12	150	1880
Newton Paper Company.....	48	21	350	1880
Nonotuck Paper Company.....	27	29	175	1881
Nonotuck Paper Company.....	48	20	570	1881
Riverside Paper Company.....	48	20	495	1881
Syms & Dudley Paper Company.....	45	29	325	1880
Syms & Dudley Paper Company.....	24	29	140	1881
Springfield Blanket Company.....	36	18	155	1877
The Beebe & Holbrook Paper Co....	24	19	75	1884

	Diam. in inches.	Head on Wheels.	Horse Power.	Date of Setting.
The Massachusetts Paper Company.....	39	19	197	1883
Union Paper Company.....	45	20	285	1882
Union Paper Company.....	30	20	125	1882
Valley Paper Company.....	42	27	390	1882
Waugrean Paper Company.....	42	18	210	1879
Waugrean Paper Company.....	33	18	130	1882
Whiting Paper Company.....	27	18	85	1882
Whiting Paper Company.....	18	15	30	1880
Winona Paper Company.....	48	28	540	1880
Winona Paper Company.....	24	28	135	1880

Increase since..... 9,797
Total 10,576

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THE MARKETS.

OFFICE MANUFACTURERS' RECORD,)
BALTIMORE, April 14, 1886.)

The market remains as last reported, and we quote the list nominally unchanged, as per annexed figures:

Ref. Bar Iron, 1 to 6½ to 1.....	"	1.85@	2.10
" " " 1 to 4½x½ to 1.....	"	1.85@	2.10
" " " ¾ to 2, round and	"		
square.....	"	1.85@	2.10
Hoop Iron, 1½ wide and upward....	"	2½@	2½c
Band Iron, from 1½ to 6 in. wide....	"	2.30@	2½c
Horseshoe Iron.....	"	2½@	3 c
Norway Nail Rods.....	"	5 @	5½c
Black Diamond Cast Steel.....	"	9 @	10 c
Machinery Steel.....	"	3½@	4½c
Spring Steel.....	"	3½@	4 c
Common Horse Shoes.....	"	3 @	9 c
Railroad Spikes, 5½x9-16.....	"	2.30@	2½c
Horse Shoes, 1½ keg.....	"		3 70
Mule Shoes.....	"		
Steel Boiler Plate.....	"	3½@	3½c
Iron Boiler Plate.....	"	2½@	4 c
Boiler Tubes.....	"	55¢ off list	

The pig iron market has experienced a rather quiet week, with no change in prices. We quote as follows:

Baltimore Charcoal Wheel Iron (all			
Baltimore ore).....	\$35	00	26 00
Virginia C. B. Charcoal Wheel Iron.....	35	00	26 00
Anthracite, No. 1.....	18	00	19 00
" " 2.....	16	00	17 00
" " 3.....	15	00	16 00
" " Mottled and White.....	13	00	14 00
Old Iron Rails.....	21	00	22 00
No. 1 Wrought Scrap.....	28	00	19 00
Old Car Wheels.....	16	00	16 00

There is a fair amount of business coming in for the season of the year, and indications point to a continued improvement. Prices remain as last reported.

Nails show a slight improvement in the volume of business none. The prices remain \$2.50@2.60.

PHILADELPHIA, April 13, 1886.

Prices of all kinds of iron and steel preserve a remarkable uniformity, in the face of the declining demand. Manufacturers do not believe that this decline will continue, as the consumption of the country continues very heavy and buyers must be driven into the market, they think, in a short time. The industrial uncertainties have had the effect of keeping buyers from placing their large contracts. Standard forge iron is selling at \$16.50; No. 2, \$17; No. 1, \$18.50. Several lots of Southern iron were sold at \$16 for forge and \$17 and \$18 for foundry Nos. 2 and 3. Much more iron is expected to come to market.

and 1. Buck bars are \$29 to \$30, with very few sales. Work is not crowding in at any of the mills, neither bar, sheet nor plate, but fortunately most of the mills have orders that will run them through this month at least. There are one or two exceptions in regard to sheet iron. Common iron is sold to-day at \$1.70. Merchant steel is also an exception, being in good demand and selling at asking prices, although they are low. Steel rails are selling at \$35. There are offers of \$34 from buyers. The mills are full of work, and if makers were inclined to yield a little, they could no doubt sell many more rails. The supply of old material of all kinds is large, and prices are inclined to weaken. Old rails are quoted at \$21 on cars. Very few orders for bridge iron have been placed. It is probable that some large business will be done, because bridge builders and agents have been conferring together, but it is not known what is in the way of business. The general commercial situation is a little off.

Specially reported by ROGERS, BROWN & Co., Pig
Iron Commission.

CINCINNATI, April 12, 1886.

turers are to be harassed through the spring and summer with strikes and disputes, it will materially affect all new enterprises and hurt general business. There has been a fair run of small orders through the week, and no quotable change in prices. We quote for cash f. o. b. cars Cincinnati:

HOT-BLAST FOUNDRY.

Ohio and Southern Strong Coke	No. 1.	\$18 00	@18 50
" " "	No. 2.	16 00	@17 00
" " "	No. 3.	16 00	@17 00
Ohio Soft Stonecoal,	No. 1.	18 00	@18 50
" " "	No. 2.	17 00	@17 50
Mahoning and Shenango Valley Coke, No. 1.			18 50@19 00
CHARCOAL IRON.			
Hanging Rock,	No. 1.	\$21 00	@22 00
" " "	No. 2.	20 00	@21 00
Tennessee and Alabama,	No. 1.	19 00	@19 50
" " "	No. 2.	18 00	@18 50

CHARCOAL IRON.

Hanging Rock,	No. 1.....	\$21	00@22	00
" "	No. 2.....	20	00@21	00
Tennessee and Alabama,	No. 1.....	10	00@10	50
" "	No. 2.....	18	00@18	50
FORGE.				
Strong Neutral Coke.....		\$15	50@16	00
Mottled " "		14	00@15	00
Cold Short.....		14	00@15	00

CAR WHEEL AND MALLEABLE.

Southern Car-Wheel Iron.....	23	00@25	00
Hanging Rock C. B.....	28	00@30	00
" " W. B.....	32	00@24	00
Lake Superior Malleable.....	24	00@25	00

Specially reported by E. L. HARPER & CO.

CINCINNATI, April 12, 1886.

The week just past has been a very quiet one in the pig iron trade. Commission men generally report but few sales and in small quantities. The labor troubles together with the high water throughout the land, has greatly unsettled trade of all kinds, consequently business men generally feel somewhat discouraged, but many are making the best of the situation, and are going ahead looking for a brighter prospect in the near future. We quote for cash f. o. b. boat or cars here:

FOUNDRY. Cash.

Hanging Rock Charcoal, No.	1.....	\$19 50	@20 00
" "	2.....	18 50	@19 00
Southern Charcoal	1.....	18 50	@19 50
" "	2.....	17 50	@18 50
Strong Neutral Coke,	1.....	17 50	@18 00
" "	2.....	17 00	@17 50
American Scotch,	1.....	17 50	@18 00

GREY FORGE.

Neutral Coke.....	15 00@15 50
Cold Short.....	14 50@15 00

CAR WHEEL AND MALLEABLE.

Hanging Rock, strictly cold blast.....	25	00@26	00
Hanging Rock, strictly warm blast.....	31	00@31	50
"Cranberry," N. Carolina Warm Blast.....		@23	50
Amherst and Virginia Warm Blast.....	31	50@22	00
Lake Superior Charcoal, all grades.....	23	00@24	00

Specially reported by W. B. BELKNAP & Co., Nails,
Wire, Iron, Hardware, Carriage and Wagon
Goods.

LOUISVILLE, KY., April 12, 1886.

The cold wet weather and the overflows mentioned in our last report continued until two or three days ago. The river already at flood height was re-inforced by the heavy rains and snows at head water and along the lower tributaries, and were it not for the comparisons instituted with the extreme floods of 1883 and 1884, this would be considered a great one. It is about up to the second story of the houses at the foot of Fourth street. Those familiar with our city can judge of its extent and devastation.

The completion this week of the great cantilever bridge connecting our city with New Albany, Ind., marks another great step of local progress. This will be used by railroads, street cars, wagons and pedestrians as well, and has been a long felt want. The center span is 520 feet, and claimed to be the longest one yet built on this principle.

Bar Iron.—Is rather quiet. Country transportation is out of the question until the roads dry, as a good deal of construction that was planned has been interfered with. The other kinds of iron, hoop, bands, sheet, galvanized sheet, etc., are also quiet, although manufacturers of sheet insist that the prices now prevailing are lower than they can possibly be later on and advise their friends to buy.

Nails.—Notwithstanding the reconciliation promised between the association and nailers from time to time, none such has up

Wire.—Is in good demand, both plain and barbed. As soon as the waters fairly get out of the bottoms it is expected that there will be something of a rush for supplies in this line. Prices are fairly well upheld and no cutting reported anywhere. We quote:

Bar Iron.....	1	80	90
Cast Steel.....	10	10	12
Now Steel slabs.....	3	50	75
No. 7 Sheet.....	3	50	75
Galvanized sheet, best.....	3	50	75
Galvanized Iowa barb wire.....	4	75	85
Burden Shoes.....	4	15	25
Junata Shoes.....	4	15	25
Carriage Bolts.....	3	75	85
Steel nails.....	2	65	75
Iron Nails.....	2	50	60
Rope, Sisal.....	8	10	8 1/2
Rope, Manila.....	10	15	13
Screws, American Screw Co's list.....	7	10	8 1/2
Axes.....	6	50	6 1/2
Cross cut saws, wide, per foot.....	26	30	35 cts.
Cross cut saws, narrow, per foot.....	21	25	30 cts.

With concessions to large or wholesale buyers.

Specially reported by GHO, H. HULL & Co., Commission Merchants for the sale of Hot and Cold Blast Pig Iron.

LOUISVILLE, KY., April 12, 1886.

The market for pig iron is quiet, but some small orders are being booked at market prices. There is, however, very little offering and very little selling. Most Southern furnaces are having about all they can do to fill orders booked during the last quarter of last year. One furnace that did not sell so freely during the activity is making some iron over and above orders, but this is

The following Patents were granted to citizens of the Southern States, bearing date April 6, 1886. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

Baker, E. E., Morgantown, W. Va. File-box for documents.....	339,354
Beales, E. D., Guyandotte, W. Va. Shoemaker's tool.....	339,580
Benedict, G. S., Mayflower, Ark. Device for taking down and putting up and stretching wire.....	339,256
Connell, J. D., New Orleans, La. Spark-arrester.....	339,262
Dillard, Allie, Old Church, Va. Drill-hoe.....	338,154
Folkes, P. D., Hays' Landing, Miss. Hoe-sharpener.....	339,398
Galt, W. W., Norfolk, Va. Fracture apparatus.....	339,160
Giles, David, Chattanooga, Tenn. Apparatus for producing cast-metal pipe.....	339,402
Hall, A. J., Montgomery, Ala. Double driving-rein.....	339,405
Harrison, J. P., Danville, Va. Platform-gate for railway cars.....	339,171
Hoke, I. J., Yorkville, S. C. Spark-extinguisher.....	339,553
Keller, J. F., Shepherdstown, W. Va. Grain-drill.....	339,392
Lalley, Michael and T. J., W. A. Lang, West Covington, and A. J. Stephens, Covington, Ky. Peanut roaster.....	339,433
Leeds, Pulaski, Louisville, Ky. Balance slide-valve.....	339,438
Marshall, E. S., and R. W. Savage, Tyler, Tex. Lubricant.....	339,200
McWhorter, W. A., Norfolk, Va. Fertilizer-distributor.....	339,454
Poston, J. H., Eufaula, Ala. Cotton-cleaner.....	339,464
Roberts, J. H., Hempstead, Tex. Stock-collar.....	339,214
Schiller, Chas., Baltimore, Md. Meat-cutting machine.....	339,479
Sears, W. G., Chattanooga, Tenn. Cotton harvester.....	339,482
Stanbrough, E. C., Lead Hill, Ark. Combined washing and wringing machine.....	339,230
Sturgis, C. M., Birmingham, Ala. Car-brake.....	339,597
Thomson, J. W., Salado, Tex. Car-coupling.....	339,498
Vanduzen, E. W., Newport, Ky. Purifier of the water of steam boilers.....	339,244
Vellines, B. H., Norfolk, Va. Separating-table.....	339,605
Walter, I. W., Newberry, S. C. Churn.....	339,505
Webb, B. T., Beaufort, N. C. Steam engine.....	339,506
White, L. B., Norfolk, Va. Plow.....	339,508
Yeiser, Frederick, Danville, Ky. Car-coupling.....	339,509

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free to any address.

	PIG IRON.	
Southern Coke, No. 1 Foundry.....	\$18 00	@18 50
" " " " " "	17 00	@17 50
" " " " " "	16 50	@17 00
Hanging Rock Coke, No. 1 Foundry....	17 75	@18 00
" " Charcl, " "	20 00	@21 00
Southern Charcoal, No. 1 Foundry....	18 00	@19 00
Silver Gray, different grades.....	15 50	@16 50
Southern Coke, No. 1 Mill, Neutral....	16 00	@16 50
" " " " " "	15 00	@15 50
" " " " " "	15 00	@15 50
" " " " " "	15 00	@15 50
Southern Coal, No. 1 Mill.....	17 50	@18 00
White and Mottled, different grades....	17 00	@17 50
Southern Car Wheel, standard brands..	25 00	@26 00
" " other brands.....	21 00	@22 00
Hanging Rock Cold Blast.....	27 00	@28 00
" Warm	21 00	@22 00

Specially reported by ROGERS, BROWN & Co., Gay Building, 304 N. 3rd street, St. Louis. W. H. SHIELDS, Manager.

The strike virtually ended on this side a week ago, and trains have been running regularly since then. On the other side of the river (East St. Louis) the strikers and their sympathizers have had full sway. The governor of the State said, in effect, that he would not call out the militia until some one was killed; one woman and six men were killed yesterday, and the militia was there in full force to-day, to stay 3 weeks, or longer if necessary. They are a fine body of men, and will stand no foolishness. In consequence trains are running regularly at their points to-day, and it is hoped they will continue. Considering the strike and the unsettled condition of labor generally, prices stand remarkably firm, with no disposition to cut down, with the exception of a few Southern furnaces with "off" grades of brands little known in this market. We quote for cash, viz:

HOT-BLAST CHARCOAL.			
Missouri.....	\$17 00	@17 50	—
Southern.....	18 00	@19 50	—
Ohio.....	—	@	—
COKE AND COAL.			
Missouri.....	—	@	—
Southern No. 1.....	18 25	@18 75	—
Southern No. 2.....	17 25	@18 75	50
Southern No. 3.....	17 25	@18 75	50
American Scotch.....	18 00	@20 00	00
MILL IRONS.			
Missouri.....	16 25	@16 75	—
Southern.....	16 00	@16 75	—
CAR-WHEEL AND MALLEABLE IRON.			
Southern.....	21 00	@25 00	00
Lake Superior.....	20 00	@24 00	00
MISCELLANEOUS.			
Old Wheels.....	15 50	@16 25	—
Old Rails.....	30 00	@21 00	—
Connellsville Coke, East St. Louis.....	—	@ 5 40	—

Specially reported by LOWE & TUCKER, Brokers and Commission.

Business has resumed its normal condition, with increased vigor, and in some lines may now be said to be on a boom. The activity in real estate and in the building line has proved contagious, and many other lines of trade are feeling the effects of it in a remarkable degree. Many moneyed men from the Northern element are looking around for something to turn up, where they can invest a few hundred or a few thousand dollars, with a view to big returns in the near future. Many of the Southern foundries and machine shops are running full on stock work, which, with the increased work offered them by the roads that are changing gauge, keeps them full of work, hence the demand for pig from this quarter is on the increase. We have no change to note in prices, which are well maintained, viz:

No. 1 Foundry.....	\$15 50	@16 30
No. 2 Foundry.....	" "	@15 00
American Scotch.....	24 50	@15 00
Gray Forge.....	14 50	@15 00
Gray Ford.....	13 00	@15 00
Car-Wheel Iron.....	23 00	@25 00
Ores, Red and Brown.....	1 50	@ 2 85
Furnace Coke.....	8 00	@ 2 30
Nails, car-load lots, 30 days.....	" "	@ —
Bar iron, per 100 lb.....	" "	@ 75
Old Rails.....	" "	@21 00
Old Wheels.....	" "	@15 00
Wrought Scrap, No. 1.....	" "	@ 70
" " "No. 2.....	" "	@ 50
Cotton Tie Clippings.....	" "	@ —
Cast Scrap.....	" "	@ —
Railroad Splices.....	" "	@ 1 85
Railroad spikes.....	" "	@ 2 25
Light Steel Rails.....	" "	@ —
Barb wire—Cambria link.....	" "	@ —
Barbed wire—four point galvanized... ..	" "	@ —
Barb ware.....	" "	@ —

They have a new automatic 100 horsepower engine which gives power to a line shaft 200 feet in length. The factory is arranged with all modern conveniences, such as dry house, heating apparatus, &c. Mr. Avery, who made the selection of machinery, is a young man of 23 years, a native of North Carolina, and has the Yankee push to make this one of the best furniture factories in the State. He went through and investigated all of the furniture factories in Cincinnati, Indianapolis, Grand Rapids and other places, and gained considerable information in his travels in regard to the latest devices and improvements for manufacturing furniture of the latest design both cheaply and in a first-class manner.

The mill is situated on the bank of a small river, which furnishes them with logs. They have the most improved booms, and propose to take advantage of this extra water power. The logs are cut on a band saw mill. The machinery, as Mr. Avery has it arranged, will take the timber from the logs and with very little waste make furniture of it, smoothing it, polishing it, carving it and putting it together, thus saving the work of cabinet makers.

The entire outfit of furniture machinery, including the band saw mill, shafting, pulleys, hangers and belting were furnished by the Egan Company, of Cincinnati, O., who are recognized as among the leading manufacturers of this class of machinery in the in the world.

THE Standard Watchman's Clock, manufactured by O. E. Hansburg, 71 Nassau St. New York, is designed to control a watchman who is given charge of warehouses, stores, public buildings, etc., etc., and to secure an absolute certainty of protection against his neglect of duty or carelessness.

The watch movement (which is covered and entirely separate and distinct from the recording mechanism) is very finely finished throughout, full ruby jeweled, with lever escapement, and has given satisfactory results under rigid tests.

The manufacturers have lately added the Patent Center Pinion used by the Waltham Watch Co. for their watches, which prevents any damage to the movement in case the mainspring breaks. No other watchman's clock has this improvement, it is said.

The clock is made on the plan of all American watches. If any part is broken or injured, it can at once be duplicated or replaced, and no delay is occasioned by having to make such part to order.

The case is absolutely dust-proof, forming a complete and almost air-tight box, and is provided with a safety lock attachment (patented April 25, 1882), which marks the paper dial whenever the case is opened or closed, making it impossible for any watchman, or even mechanic, to open the case without detection.

Illustrated circulars and prices may be obtained from the manufacturers.

THE American Ship Windlass Co., Providence, R. I., are the foremost and most progressive manufacturers of windlasses in the United States. It is gratifying to note that at the present time they are busier than they have been at any time since their works were established in 1857, and they have more

We ask your special attention to our new line of Clothes Wringers. An experience of over 13 years in the manufacture and sale of this class of goods, we believe, enables us to judge correctly of the wants of the trade and the public.



Special care has been taken in the construction of all our Wringers to overcome difficulties and weak points that have been developed in this class of goods by past experience, and we believe a careful examination will show that we have succeeded in this respect in a marked degree.

Our facilities for the production of these goods are unexcelled; we have a new factory; the latest and most improved machinery; the best of skilled workmen, and are fully able to meet any demand that may be made upon us, either for quantity or quality.

WE DO NOT USE THE OLD TUBE ROLLS in any of our Wringers, but use exclusively the Patent Rolls in which the RUBBER IS VULCANIZED UPON the SHAFT.

In all our lines of goods we shall endeavor to keep the standard of quality up to such a point of excellence as will merit the confidence and favorable consideration of the entire trade. All correspondence and orders will receive prompt and careful attention.

Send For Catalogue.

LOVELL MANFG. CO., Limited, Erie, Pa.

orders on their books than ever before during their 29 years' existence.

Among the orders they have recently taken are the following:

Steamer, building by Frank W. Wheeler at West Bay City, Mich., a Providence capstan windlass, with iron-side bits, Gypsy ends, and all improvements.

Barge, building by Frank W. Wheeler, a Providence pump-brake windlass.

Schooner Lemuel Hall, of Fall River, Mass., a Providence pump-brake windlass (new style), with Grater's patent friction clamps, to replace a wood windlass.

Barge Mary Whetridge, belonging to Boston Towboat Company, a Providence steam pump brake windlass, with iron-side, and pawl bits, Gypsy ends, automatic oiler for worm gear, and all improvements.

Barge Expounder, of Eastern Transportation Line, a Providence pump-brake messenger chain windlass, to replace a Thayer messenger chain windlass.

Schooner R. G. Whilden, now rebuilding at the Providence Marine Railway Company, a Providence pump-brake windlass, to replace a wood windlass.

The large sloop racing yacht building by Geo. Lawley & Son, at South Boston, a "Providence" patent yacht windlass, with iron side bits, iron pawl bits, Gypsy ends, etc.

The steam yacht building by Geo. Lawley & Sons is to have a "Providence" pump brake yacht windlass, same as that for the sloop yacht.

The racing yacht Atlantic will have a "Providence" pump brake yacht windlass, same as the ones at Boston.

The large steam barge building by Detroit Dry Dock Company for Eddy Bros. & Co., a steam capstan windlass, "new style," with all latest improvements; also a steam capstan, to go aft, for handling stern lines.

The two steamships building by Wm. Cramp & Sons' Co. for Wm. P. Clyde & Co., steam capstan windlasses, "new style," with automatic oiler for worm gear, engine counterbalance, Phinney's patent chain indicator, for measuring the chain paid out or taken in. These windlasses will be the same in every way (except size) as the one previously ordered by the same firm for the Morgan Line steamer now building at their yard.

Car float, building at South Amboy for Pennsylvania Railroad Co., a Providence pump-brake windlass, with brakes made to work fore and aft instead of thwart ships, to save room.

The above list is the most encouraging evidence of a steady advance in the ship-building interest, as the majority of these windlasses ordered are for new vessels.

Bids were opened on Monday of last week in the office of the Commissioner of Public Buildings and Grounds, for repairing the roof of the White House.

The only bids received were those of Merchant & Co., and N. & G. Taylor Co., both of Philadelphia.

The former offered "Gilbertson's Old Method" Martin-Siemens steel extra coated roofing plates at \$6.70 per box for IC 14x20 size—guaranteeing 120 pounds as net weight per box.

The latter offered first quality "old style" Martin-Siemens steel dipped roofing plates at \$6 per box, of 112 pounds, and "Westminster" roofing plates at \$5.75 per box.

As the Government advertised for, and based its decision "upon weight, ductibility, uniformity of plates, and thickness and quality of coating, as well as upon price," the "Gilbertson's old method" roofing plates, have been accepted and ordered for the roof of the Executive Mansion.—Philadelphia Evening Star.

THE Victor Caloric Engine is a simple but powerful hot air engine that can be run by either gas or kerosene. It may be used as a pumping engine in place of windmills or other pumping apparatus, or

as a motor for running printing presses, sewing machines, coffee mills, &c.

In places where there is no fire department, factories and mills furnished with a water tank and one of these engines, would have a pretty good safeguard against the spread of fire.

The office of the Victor Caloric Engine Co. is at 12 Cortlandt St., New York.

THE McMillan Oil Co. and the lubricating department of the firm of Clark Bros. & Co., Cleveland, O., have amalgamated their interests, and will be known hereafter as the Star Lubricating Oil Works. Mr. Geo. McMillan, who has been so extensively and favorably known by the public as the head of the McMillan Oil Co. will manage and have charge of the new concern. They make a specialty of Southern trade and their business in that section is constantly growing larger as their oils are tried. Mr. McMillan understands the secret of success in his business—"to keep up quality and put down prices"—and carries it on effectually.

Their card will be found on another page of this paper.

Consumers of lubricating oils will find them a pleasant firm to do business with and square as a die.

THE Taper Sleeve Pulley Co., Erie, Pa., have received several orders for their celebrated Friction Clutch Pulleys to be used in electric light plants in various parts of the country.

Among Southern electric light companies who use these pulleys are the new Brush company in Louisville and the company at Lexington, Ky.

The Friction Clutch Pulleys allow no slipping of belts, which can be detached without slackening the speed of the engine. For use in electric light plants or for nearly any duty, they are valuable, possessing, it is said, special advantages in the matter of economy of power. The manufacturers solicit correspondence and will send descriptive circulars upon application.

WE call attention to the advertisement elsewhere of wood-working machinery, &c., wanted.

Important.

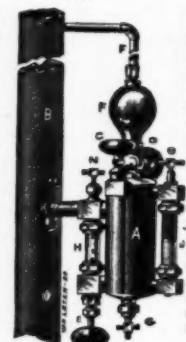
The improvements of the Grand Union Hotel are simply elegant, and the hotel is always kept in perfect order. It is so convenient to all the depots that guests arriving by the Grand Central Depot have their baggage transferred to and from the Grand Union Hotel in five minutes, free of charge. Guests arriving by steamer or railroad, South, North, East or West, are conveyed to the Grand Union Hotel by the elevated railroad for five to fifteen cents, thereby saving \$3 carriage hire. During the past year 110,000 people occupied the 613 rooms of the Grand Union Hotel at \$1 and upwards per day, including of course its elegant suites of rooms for families on the European plan. The dining-rooms, restaurant, cafe, lunch and wine-rooms were supplied with the best at moderate prices. Families lived better at the Grand Union Hotel, and for less money, than at any other first-class hotel in New York.

TRAVELERS bound for Boston will do well to stop at the favorite American House in that city, where all the comforts of a quiet first-class Hotel and all the luxuries of the season at table may be enjoyed at popular prices.

For Sale Cheap

15 H. P. Boiler and Engine.
One 30 to 40 H. P. Locomotive Boiler.
All kinds of MACHINERY on long time.
WM. C. Codd,
306 Aliceanna St., - Baltimore, Md.

THE DETROIT Sight Feed Lubricators



Have revolutionized the system of oiling valves and cylinders of steam engines. The oil is delivered through the SIGHT FEED GLASS drop by drop into the steam pipe, lubricating perfectly all the parts from throttle valve down, effecting a sufficient saving in oil and wear of machinery to pay for the Lubricator several times a year. It costs nothing to try them, as one will be sent on thirty days trial to responsible parties, thus enabling a thorough test to be made before paying for the Lubricator. We refer to 20,000 users, including nearly all the leading railroads.

CAUTION.

As these Lubricators are covered by patents owned solely by this Company, parties should order only the "DETROIT SIGHT FEED CURS," thus securing the best article and avoiding all legal complications. Liberal discount to the trade.

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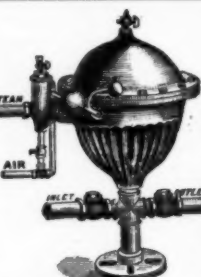


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Combines all the best elements essential in a first-class Hammer. Has more good points, does more and better work and costs less for repairs than

any other Hammer in the World.

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STEAM TRAP

For returning steam condensed under pressure automatically into the boiler, whether taken from above or below the boiler level, without loss or waste.

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Established 1867.

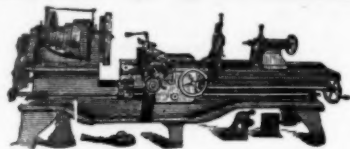
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WORKS AND OFFICE,

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Manufacturers of Patent Extension

LATHES



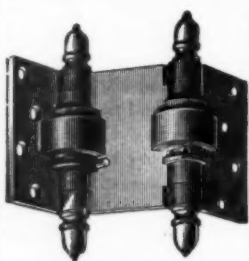
Iron Planers, Boring Mills, Drills,

And a variety of other MACHINISTS' TOOLS.

Patent Double Chain Screw Pulley Blocks, unrivalled for durability, safety and power. Patent Double Chain Quick Lift Hoists, with Brake for quick and easy lowering.

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Circulars furnished.



UNION SPRING HINGES
are Simple, Easily Set,
and cannot be put on wrong. They work
smoothly and are made of the best
material. Light Doors they have no equal. Send for
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NEAR LIGHT, BALTIMORE.

Repairing of all kinds promptly done.

\$250 WILL BUY



THE BEST SAW MILL

Yet offered for the money.

SEND FOR CIRCULAR.

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ATLANTA SAW WORKS.

Manufacturers of every variety of

SAWS!!

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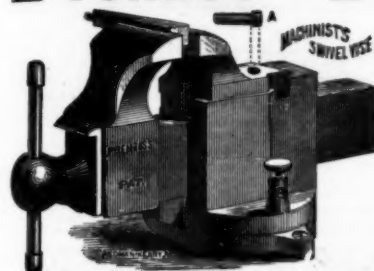
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"Peerless" (Swivel Jaw) Pipe Grip.

Every Part Interchangeable.
CAN BE USED ON ANY VISE.

Adjustable Jaw.
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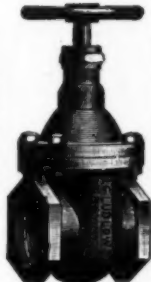
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Double and Single Gate, 1/4 inch to 48 inch—inside and outside
Screws, Indicators, etc., for
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Capacity 15,000 to 450,000 feet per day. Complete outfits planned and furnished.

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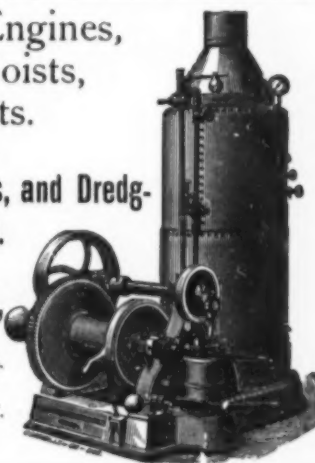
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References: { Croton Magnetic Iron Mines, Brewster's, N. Y.
Crown Point Iron Co., Crown Point, N. Y.
Belvidere Iron Co., 52 Broadway, N. Y.
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Manufacture PATENT WROUGHT IRON HAND AND POWER SHEARS,

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Also a Full Line of WAGON HARDWARE.

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CHAS. P. FAY,

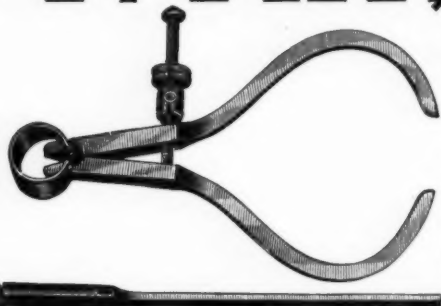
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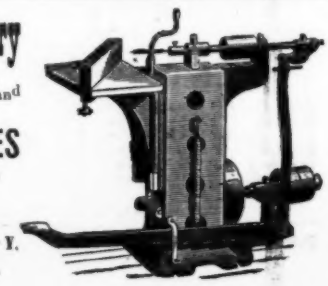
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New list.....	dis 70% to 10% to 10%
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Union Nut Co.....	dis 55%
Sargent's.....	dis 60% to 10%
Humason, Beckley & Co's.....	dis 60% to 10%
BUTTS.	
Wrought Brass.....	dis 70%
Cast Brass, Fast Joint.....	dis 60% to 10%
Cast Brass, Loose Joint.....	dis 10% to 10%
Fast Joint, Narrow.....	dis 60% to 10%
Fast Joint, Broad.....	dis 60% to 10%
Loose Joint, Japanese.....	dis 70% to 10%
Loose Joint, Jap, with Acorns.....	dis 70% to 10%
Parliament Butts.....	dis 70% to 10%
Mayer's Hinges.....	dis 70% to 10%
Loose Pin, no Acorn.....	dis 70% to 10%
Loose Pin, Acorns.....	dis 70% to 10%
Loose Pin, Acorns, Japanese.....	dis 70% to 10%
Loose Pin, Acorns, Jap'd, Plated.....	dis 70% to 10%
Tips.....	dis 70% to 10%
Wrought Iron.	
Fast joint, Narrow.....	dis 65%
Fast joint, L. Narrow.....	dis 65%
Fast joint, Broad.....	dis 65%
Loose joint, Broad.....	dis 65%
Table Butts, Back Flaps, &c.....	dis 65%
Inside Blind, Regular.....	dis 65%
Inside Blind, Light.....	dis 65%
Loose Pin, Wrt.....	dis 65%
Loose Pin, Light.....	dis 65%
Spring Hinges.....	
Geer's Spring and Blank Butts.....	dis 30%
Hart Manufacturing Co.....	dis 60% to 10%
American Spring Hinge Co's.....	dis 25%
Gem Spring Hinges.....	dis 25%
Blind Butts, Shepard's, Nos. 50 and 60.....	dis 70%
Blind Butts, Shepard's, No. 50.....	dis 70% to 10%
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Humason & Beckley Mfg. Co.....	dis 25%
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American.....	dis 75% to 10%
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Sardine Scissors.....	dis 25% to 10%
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American Adjustable.....	dis 45
Baxter's Adjustable "S," list Jan., 1880.....	dis 50 1/2
Baxter's Diagonal.....	dis 50 1/2
Coes' Gemine.....	dis 60
Coes' "Mechanics".....	dis 60 1/2
Coes' Pattern, Malleable.....	dis 75
Coes' Pattern, Wrought.....	dis 60 1/2
Girard Standard.....	dis 50 1/2
Girard Adj.....	dis 60 1/2
Always Ready.....	\$5.00—25

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Universal, XX, No. 18.....	each 29.75
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"Diamond" Vegetable Grater.....	\$5.00 1/2 doz., 10
Rotary Knife Potato Parer.....	\$18.00 1/2 doz., 10
Metallic Shingles.....	\$5.50 and \$6.50 per square
Hopper Cherry Seeders.....	\$5.00 1/2 doz., 10

Syracuse Twist Drill Co.

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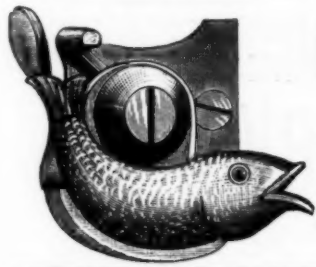
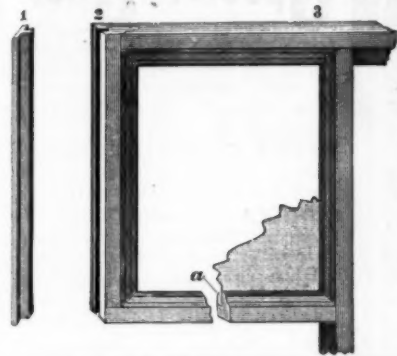
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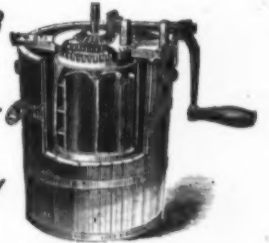
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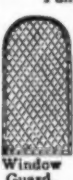
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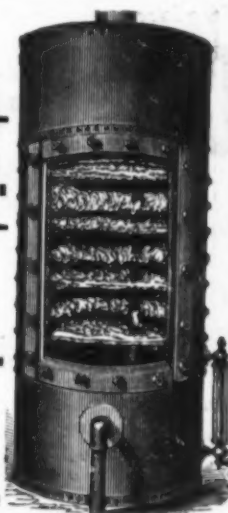
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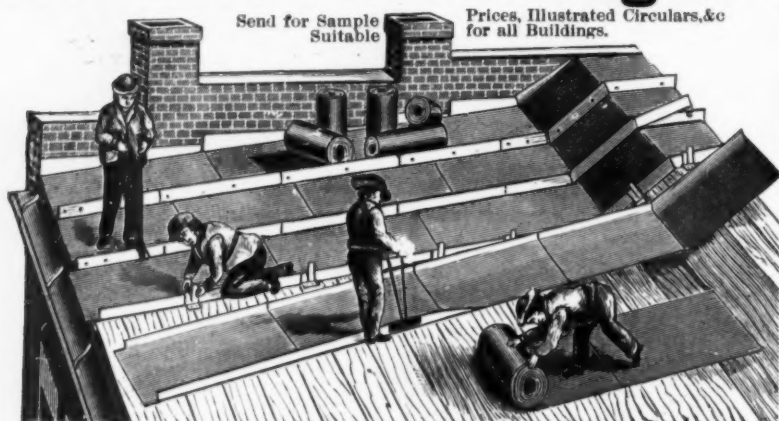
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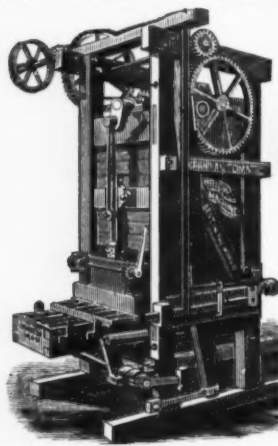
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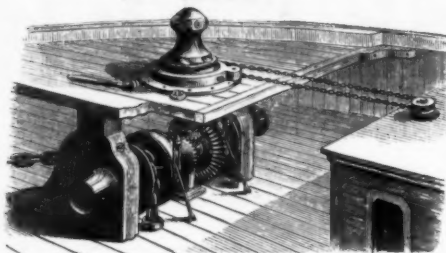
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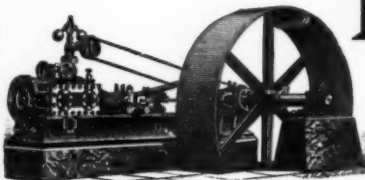
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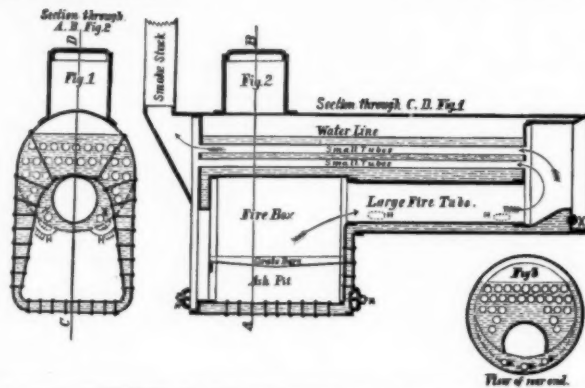
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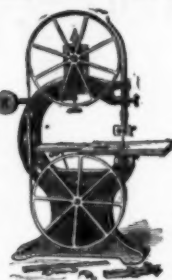
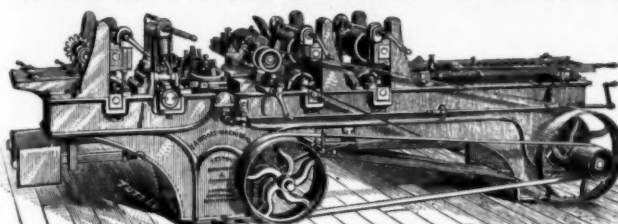
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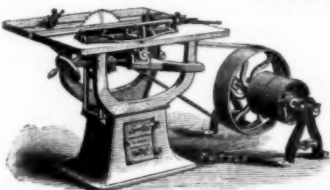
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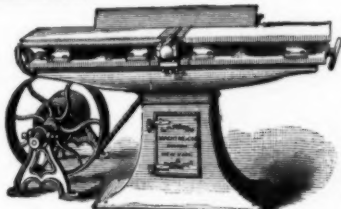
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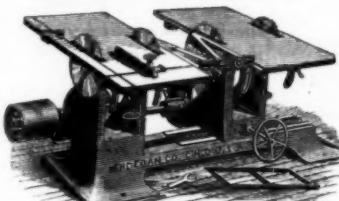
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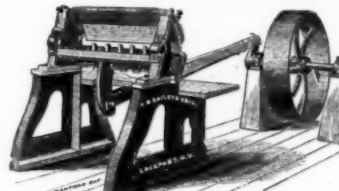
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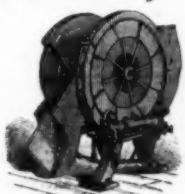
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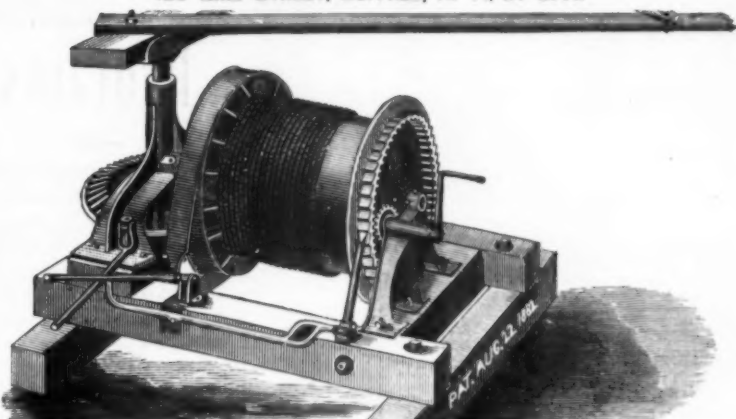
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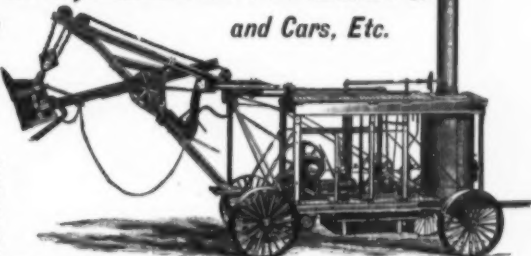
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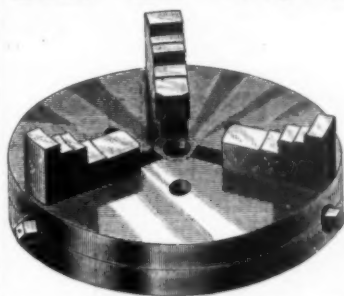
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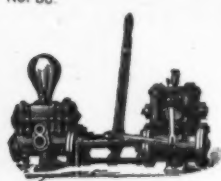
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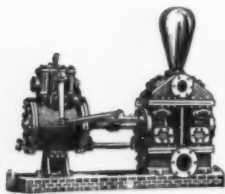
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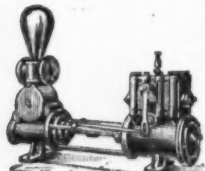
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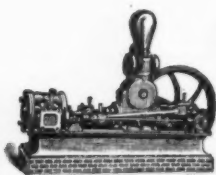
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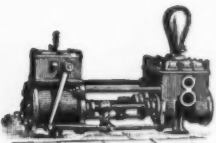
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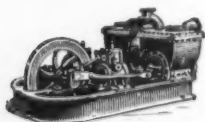
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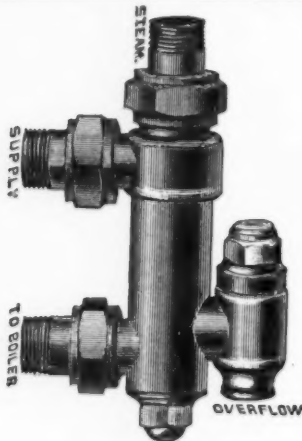


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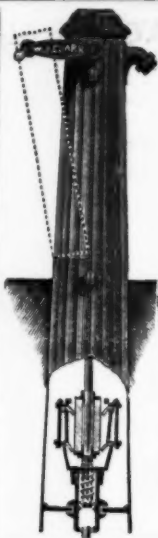
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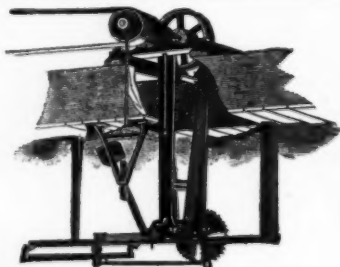
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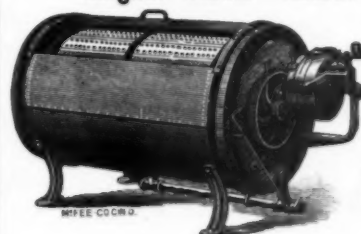
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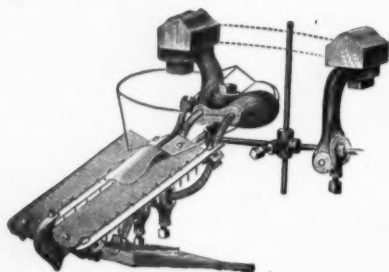
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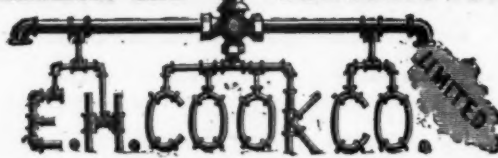
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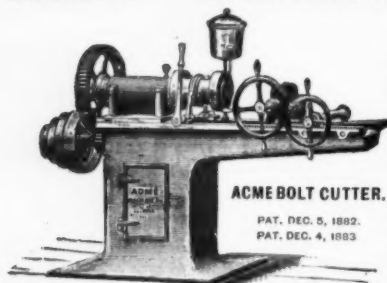
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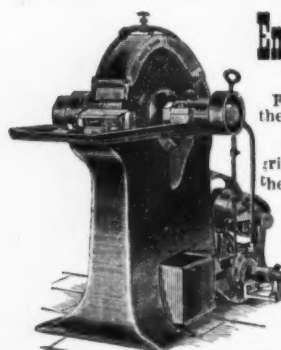


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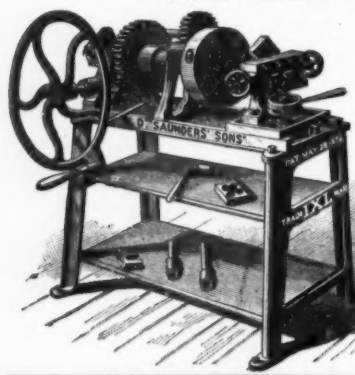
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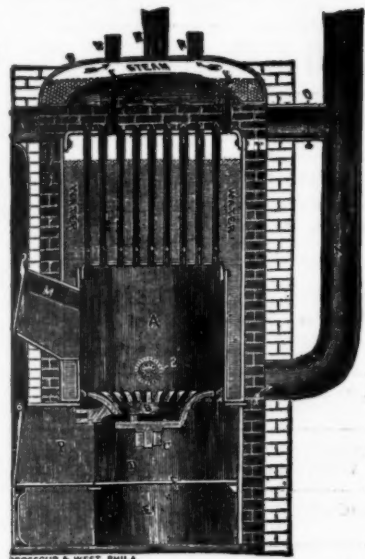
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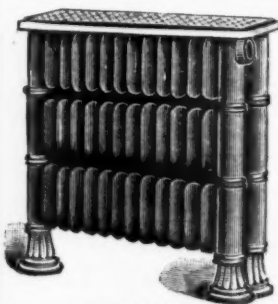
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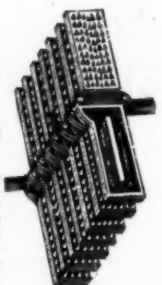
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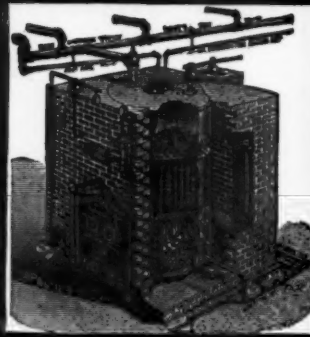
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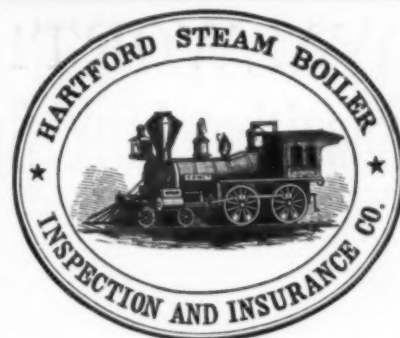
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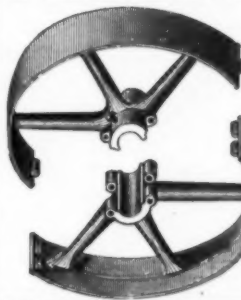
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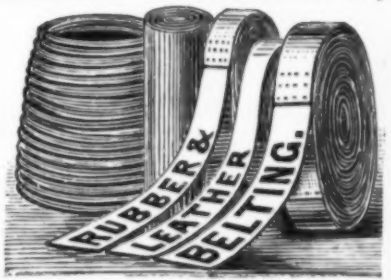
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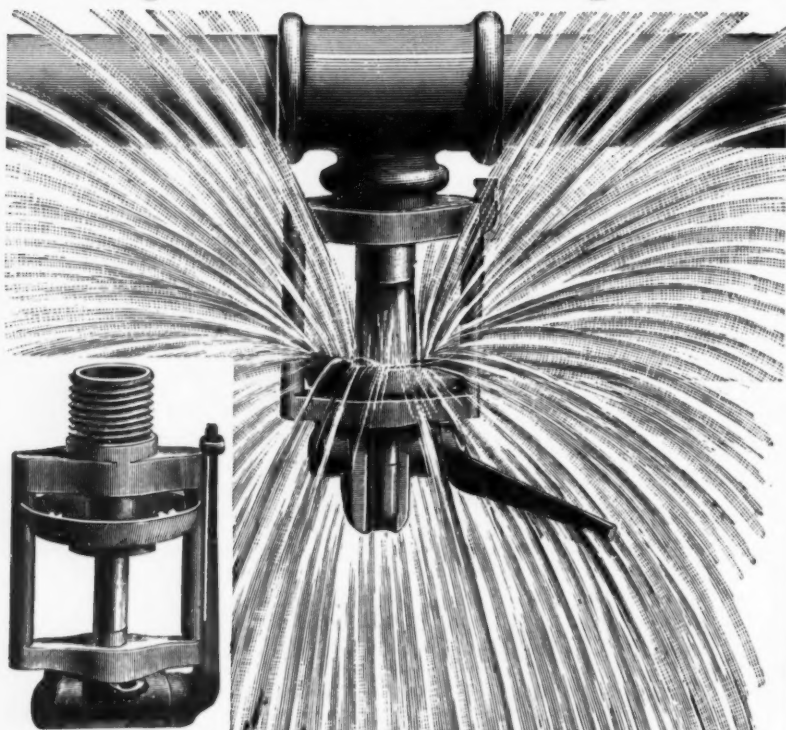
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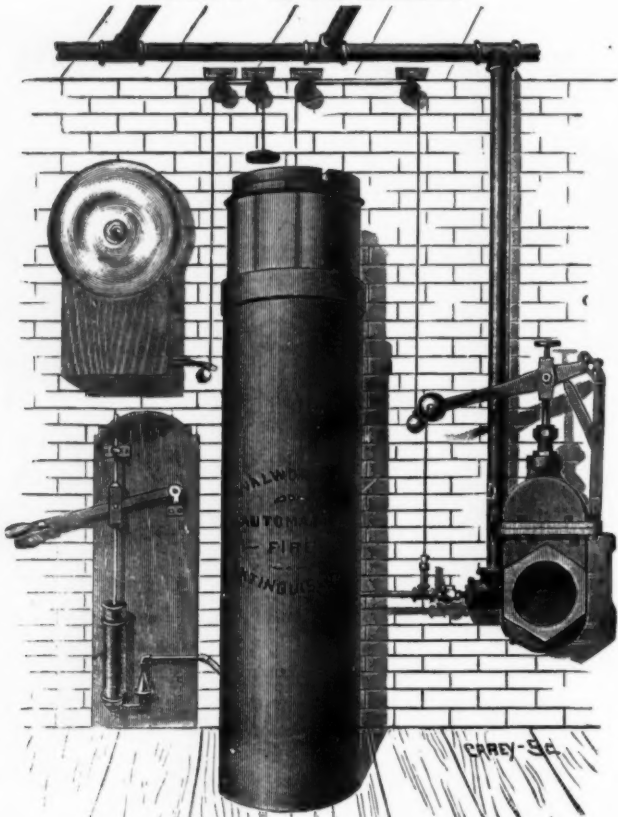
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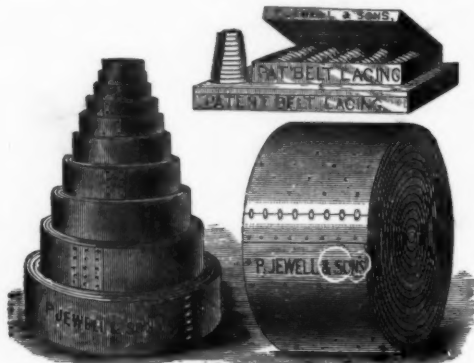
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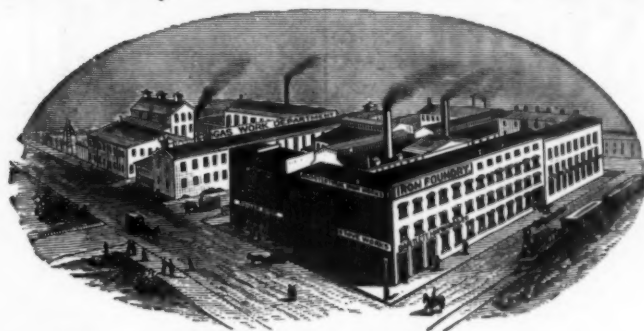
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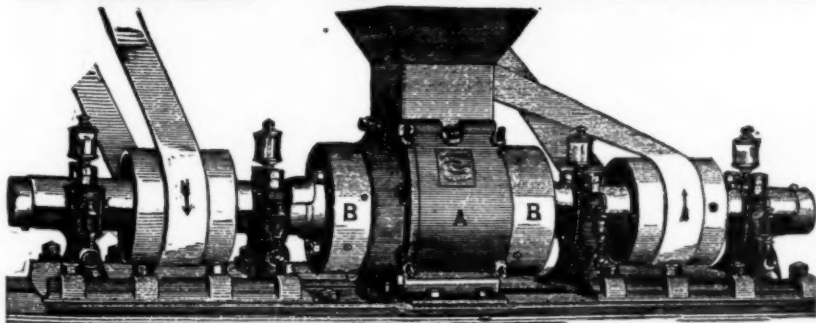
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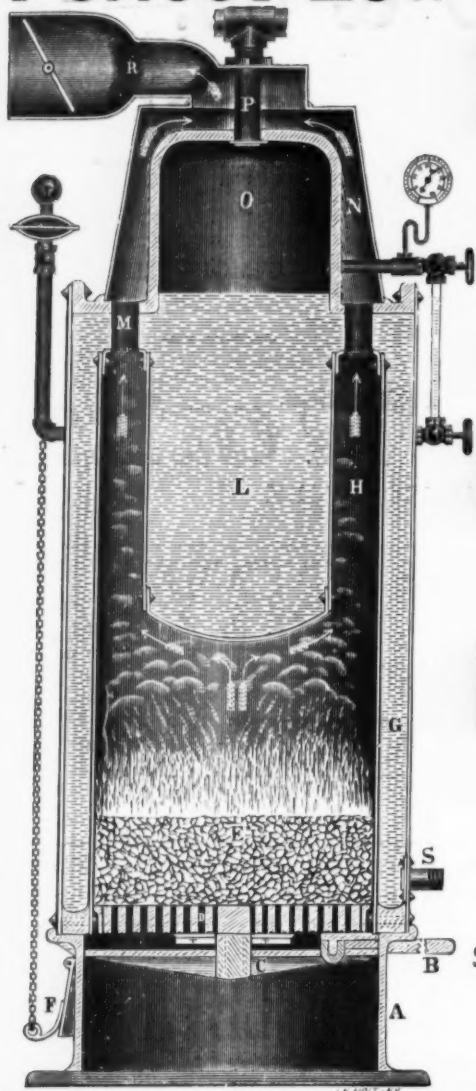
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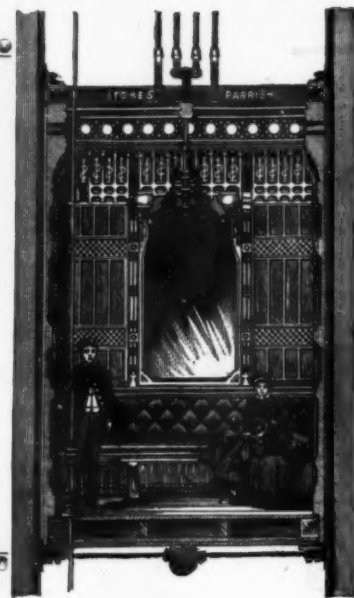
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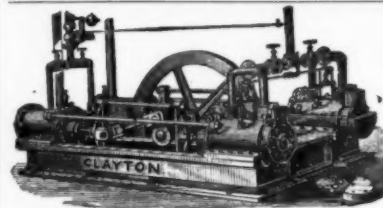
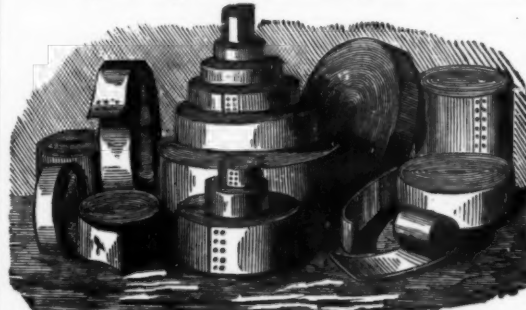
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